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COMPARATIVE ANTHROPOLOGY OF ENGLAND AND
WALES.*

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"Let some Fellow also do for England what M. Paul Broca has done so well for France, and write us a Memoir on the Ethnology of England."—Dr. JAMES HUNT, *Anniversary Address before the Anthropological Society of London*, delivered January, 1864.

IN 1861 I read a paper before the Ethnological Society of London, entitled "Results of Ethnological Observations made during the last ten years in England and Wales." Up to that time ethnology had generally been treated as a branch of philology, archæology, or history. It could not be said to have had an independent foundation, or to have acquired the rank of a distinct department of science. Many, perhaps the majority, of those calling themselves ethnologists did not believe in ethnology according to the most approved and authoritative meaning attached to that word, namely the science of blood, or races of mankind resulting from genealogical descent. The attempt to classify races in Europe, and especially in England, was then generally looked upon as presumptuous, or, at least, as not likely to lead to a satisfactory result. In the discussion which followed the reading of the above paper, one of the Fellows considered the attempt as dangerous, by which I suppose he could only mean dangerous to preconceived theories. Several of the speakers favoured the views of the author, but the majority seemed to agree in thinking that the races described in the paper as occurring in England and Wales were not due to lineal descent from tribes of early inhabitants, but either arose by accident

* We propose to publish, from time to time, a series of personal observations on the Comparative Anthropology of the British Islands.—EDITOR.

or according to a law by which human beings become adapted to circumstances or occupations. It was likewise alleged that to substantiate the doctrine of genealogical derivation would require the discovery of counterpart races in those districts of Europe from which England was colonised.

As there would still appear to be a great indisposition to believe that distinct, hereditary, and long-persistent races or types can be traced in different districts of England, it may be necessary, before proceeding to a statement of facts, to make a few general observations.

Alleged Disappearance of Types by Crossing.—It is not to be wondered at that those who have had few opportunities of making particular and repeated* observations in different parts of England, should doubt the possibility of *types*† of mankind being perpetuated, more especially as we are continually reminded by the newspaper press of migrations taking place from one town or province to another. Previously to travelling, or as long as we are contented with being library anthropologists, we are likely to be left in ignorance of the extent to which the masses of the English population still cling to their native districts. Internal migration in England is generally limited to the middle or more affluent classes. The great bulk of the people very seldom shift their localities, except in manufacturing districts, and even then it could be shown that at least three-fourths of the inhabitants of a manufacturing town, such as Sheffield, have either been born in the town or have come from the neighbourhood. Railways in many respects have favoured migration, but it could be shown that in quite as many cases they have rendered a change of residence unnecessary. But the fact that different dialects still linger in different parts of England is a sufficient proof that the interblending of races has not proceeded to an extent capable of destroying typical distinctions, or rendering the classification of the inhabitants impossible. The uneducated natives of one anthropological area‡ are still nearly unintelligible to those of another area. In one area at least nineteen-twentieths of the people still say *we* for *us*, *her* for *she*, *I* for *me*, and *vice versa*. They likewise pronounce *s* as if written *z*, *t* as *d*, etc.§ This area includes a part of

* If repeated observations are necessary in geology to insure an arrival at truth, they are still more so in anthropology—a science in which the phenomena are much less strongly marked, and the boundary lines less distinctly defined.

† I shall principally use the word *types* in this article, because in an infant science, like anthropology, more systematic names are premature.

‡ A district, without reference to county divisions.

§ These modes of speech are used not by one race, but by several races, who must have come from the Low Countries, at a period or periods unrecorded in history. National and British school education, I have found, has

Dorsetshire and Wiltshire, nearly the whole of Somersetshire (Zomer-zetshire) and a part of Devon. In a churchyard between Salisbury and Wilton, I have seen the following epitaph :—

“How strangely fond of life poor mortals be ;
How few who see our beds would change with *we*,” etc.

The traditional characteristic epitaph of the above area would appear to be—

“Her no more shall come to *we*,
But us must go to *she*.”

The remark of a working man of Dorchester, in reference to a scolding wife, shows that these peculiar modes of speech are not incompatible with sound philosophy—“It pleases *she*, and it don't hurt *I*.”

Proofs of Typical Perpetuation furnished by Surnames.—Besides dialects, surnames show that the people of many parts of England have escaped interblending. In one area we find prevailing surnames ; in other areas these surnames are almost entirely absent. There are large districts in the south-west of England where one might travel for days without meeting with a Smith, while in the east of England there are equally large districts in which Smith is the most common name. A long article, elaborated from Directories, might be written on the local limitation of surnames. Christian names are more uniformly distributed, though I think it will be found on inquiry that in the north-east or Scandinavian part of England there is a very much less tendency to use Scripture names than in the south, where in some places it amounts to little short of a propensity. Some years ago (and it may be so still) the name of the Librarian of the Ryde Literary and Scientific Institution was Nebuchadnezzar Belshazzar Pentecost !

Presumptions in favour of Genealogical Derivation.—That the difference in type or race which, during many years, I have had opportunities of tracing in various parts of England, is not the result of accident, or of a merely *teleological law*, but exists through *hereditary descent*, is rendered highly probable, in the absence of more satisfactory evidence, by the fact that distinct dialects are often, if not generally, spoken by races having distinct physical and mental peculiarities—that these races inhabit areas colonised from certain parts of Europe—and that these dialects (except where reasons to the contrary can be assigned) are in accordance with the historical account of their derivation. A whole article, or rather volume, might be written on this

done very little to obliterate peculiarities of dialect among the working classes, partly owing to the time at school being too brief to admit of a permanent impression being produced ; but likewise owing to the *high-pressure* system generating a dislike to education among children, who, on leaving school, gladly forget what they have been taught.

subject, and much has been written. Suffice it at present to remind the reader that in Cumberland, Westmoreland, and several neighbouring districts, many traces of *Norse* may be found,* and many family names are Norwegian. In Lincolnshire, many words in the dialect, and many family names are not only of Danish derivation, but in numerous cases the latter have continued unaltered in the spelling since the time of the Scandinavian invasions.† Now if the names of persons in use among ancient *colonising* tribes are still to be found in the *colonised* districts, is it not probable that the physical and mental peculiarities of these tribes have likewise persisted? or rather, is the anthropologist not justified in taking this for granted until the contrary can be shown.

How Types are to be determined.—Admitting the force of the foregoing remarks, and allowing that types may be classified in various districts, the important question still remains, what names are we to employ? If only one uniform type existed in a given locality, the task would be easy. But when in most districts (not all) we find two or more distinguishable types, how are we to tell which is Danish, which Saxon, etc.? It is here that the anthropologist may readily lay himself open to a charge of presumption, unless he proceeds with extreme caution. There would, however, appear to be several ways of arriving at approximately satisfactory conclusions on this subject.

First, we may compare the existing mental and (as far as possible) physical peculiarities of a given type with the historically-recorded character of either the original type, or colonising type, of the locality.

Second, we may collect traditions concerning the complexion, stature, etc., of certain types.

Third, we may visit regions, or rely on the accounts of those who have visited regions, either in the British Isles or on the continent, where we have reason to believe a given type prevails uniformly, or is very decidedly predominant.

With regard to the first, it is desirable that the anthropologist should render himself well acquainted with the character of the ancient Saxon, Dane, etc., as illustrated in such books as Bulwer's *Harold, the last of the Saxon Kings*, Mallet's *Northern Antiquities*, etc.

* Since the publication of Worsaae's very valuable contribution to anthropology, *Traces of the Danes and Norwegians in England*, etc., it has become more and more customary to refer words commonly regarded as Saxon to Norse, or Danish. Capt. Fergusson, President of the Carlisle Mechanics' Institution, has lately published an important work on the dialects of Cumberland.

† Of this I was assured some years ago by the very eminent, though not professed, anthropologist, Sir E. B. Lytton, several of whose novels might justly be styled *studies in anthropology*.

Traditions are not always to be trusted, but a traveller is often struck with the extent to which the inhabitants of various parts of England agree in assigning characteristics to ancient colonising or native tribes, such as ruddiness and tall stature to the Danes, blue eyes and lymphatic temperament to the Saxon, dark complexion and excitable temper to the ancient Britons, etc.

Much caution ought to be exercised in selecting regions likely to contain an all-prevalent or preponderating type. It is true one could scarcely err in visiting certain parts of Norway, the Orkney Islands, and some parts of the Hebrides (where Norsemen have kept aloof from the Gaels), in order to make out a type to which the name Norse might be applied—in going to some parts of Denmark (not West or South Jutland) in quest of the Danish type.* For Saxons one might explore the country between the Elbe and the Weser, steering clear of Friesland—for Angles, the district called Anglen in Schleswig, where Dr. Clarke, the traveller, could fancy himself in England. For the Jutian type, the anthropologist might visit the west of Jutland, from Schleswig to the Lime Fjord—for Frisians, the region commonly called Friesland would probably answer his purpose better than Strandfrisia; for linguistic† considerations render it certain that England was largely colonised from the country to the east of the Zuyder Zee. One might expect to find pure Britons in Wales, and Gaels in the West Highlands of Scotland, though in both these countries the people are far from being homogeneous.

That the lineal descendants of ancient tribes may still be recognised in various parts of England, is not so much doubted by people in general, as by those whose minds are prepossessed by certain theories concerning the origin of admitted typical differences among mankind. The science of comparative anthropology, or that department of it—comparative ethnography, to which this article is mainly confined—is at present in a state somewhat resembling geology in the days of Dr. Hutton and Professor Playfair. These truly great philosophers wisely abjured all *speculations concerning the origin of things*. But when Dr. Hutton used these or similar words, he did not mean to exclude the

* At the British Association meeting at Birmingham in 1865, I was not surprised to see in Professor Steenstrup, the eminent Danish antiquary, a *fac-simile* of a physiognomy very common in the east and north of England.

† For all questions connected with what may be called glossological ethnography, Dr. Latham's works are the best that can be consulted. That eminent author does not seem to place much faith in ethnology as the science of blood; though I ought to acknowledge my obligations to him, many years ago, for leading me to believe that the prominent-mouthed type, so prevalent in the south-west of England, is only a less exaggerated form of the Irish Gael.

origin of *derivative* phenomena, but only what may be appropriately called the *first* origin of things; and although the question of the first origin of man lies more within the province of geology than anthropology, the changes or causes which have given rise to typical distinctions among men may be advantageously considered, before proceeding to a detailed statement of these distinctions as observed in England and Wales.*

Causes of Typical Distinctions.—Mr. Darwin has rendered great service to natural history by showing that a slight variation from an ancestor is capable of continued hereditary transmission. He has, however, I think, generalised beyond foundation in regarding all the modifications to which the organic world has been subjected as slight, or in supposing that species have arisen by almost insensible gradations. In the inorganic world—in the provinces of water and fire, we find gradual mutation alternating with *crises* of action, or a series of ordinary changes followed by a sudden paroxysm. The aqueous and igneous agents which modify the crust of the earth are more or less intermittent. Comparative repose in fluvial, oceanic, and volcanic action, is succeeded by floods, storms, eruptions, and explosions; and there can be no reason for supposing, apart from palæontological evidences to the contrary, that all the variations from ancestral organic types have been minute, or for denying that “strides in the otherwise continuous chain of succession”† may not have frequently occurred. These minute variations and strides are equally to be regarded as *creations* unless we “deify second causes;” and I can see no reason why the creational act which gives rise to a perceptible *family* variation, may not, at intervals, introduce a *specific* or *generic* variation. A general survey of the higher results of scientific investigation would appear to favour the doctrine that in the economy of the universe there are subsidiary laws dependent on a more comprehensive plan; and the sudden introduction of new species is just what one might expect to mark the ingress or egress of one of these laws.‡

* On the first appearance of his *Principles of Geology*, Sir Charles (then Mr.) Lyell was accused by some reviewers of putting the cart before the horse—of discussing the respective merits of an unimpaired and uniform series of changes, and a succession of catastrophes diminishing in intensity, before proceeding to a statement of facts showing the adequacy of existing causes to account for ancient geological phenomena. But the order adopted by Lyell was the best calculated to prepare the mind of the reader not only to appreciate, but to take an interest in, the mass of circumstantial evidences, or *veræ causæ*, contained in that justly celebrated work.

† See Lyell's *Antiquity of Man*.

‡ I think all anthropologists must admit that no positive evidences in favour of there having been a series of consecutive connecting links between

But one part of Darwin's theory certainly accounts for anthropological phenomena not otherwise easily explained. In the *Fortnightly Review* (III, 276), Professor Huxley has applied this theory to the origin of typical distinctions among men. Variations occur in a family—one variation dies out, another is preserved. It becomes isolated. By hereditary transmission its peculiarities become hardened into the "enduring character of persistent modification." According to this view, it is not necessary that a type should amount to a *specific* distinction to enable it to be hereditarily transmissible. A variation is possessed of this power, and would seem to be subjected to a law preventing a return to the original. When it has become hardened into a "persistent modification," it may endure for many, if not for thousands of years, as is evident from geology. We have only then to suppose that the types under consideration in this article were originally family variations in certain parts of Europe—that they gradually acquired a persistent character—that they have continued *until now*, and will continue until the law* which limits the period of their perpetuation shall replace them by new variations, destined in their turn to become invested with enduring characteristics.

Among men there would appear to be types which have become sufficiently hardened to resist amalgamation, and even in England many phenomena would seem to indicate that hybridity is followed by extinction or reversion to the original. In some parts, where interblending has occurred to a great extent, we still find distinct types identifiable with those which may be classified in remote and comparatively unmixed districts; and very frequently two or more types may be seen in the same family. In many cases, typical amalgamation does not apparently take place at all, but the children of two parents of distinct types follow or "favour" the one or the other parent, or occasionally some ancestor more or less remote.

We have no reason to suppose that the comparatively brief period, geologically speaking, with which the anthropologist has to deal, is sufficiently long to reveal any processes by which new types are intro-

the anthropoid apes and man have yet been discovered. The theory of his anthropoid derivation, then, must rest on the assumption that these links have disappeared, or remain to be discovered—an assumption inadmissible in *inductive* science. From the latest discussions on the Neanderthal skull, it would appear to be allied to *Gaelic*.

* I think Mr. Darwin errs in supposing, or allowing his readers to suppose, that variations capable of originating persistent modifications are accidental. We cannot conceive of their giving rise to phenomena which admit of being systematically classified without believing them to form part of a fixed system. See some able remarks on this subject, in the *Anthropological Review*, vol. iii, p. 130.

duced, so that we are justified in classifying the types which come under our notice as if they were unalterably fixed.

During the last fifteen years, I have had occasion to reside successively, and often repeatedly, in most towns of any importance in England and Wales; and I have devoted particular attention to the characteristics of the inhabitants of the surrounding districts. The people of some localities I have not been able to classify at all. In other localities, I have not felt justified in applying historical names to the typical peculiarities of the inhabitants. A description of those types, with their lateral gradations, which I have been able to make out, will form the remaining part of this memoir.

Types in North Wales.—I begin with the Welsh, not because they are really more easily classified, but because the reader will probably be more ready to believe that types may be met with in the Principality than in England.

On arriving in North Wales in 1861, I was not much surprised to find the inhabitants differing from one another, as I had previously observed a similar absence of homogeneity in South Wales. About the same time, Dr. Barnard Davis, and Dr. Beddoe, passed along the north coast on their way to Ireland, and I believe were surprised at the diversity of countenances presented by the Welsh. After a series of systematic observations, continued for several months, I succeeded in reducing the differences to the four following types:—

First, the prevailing type in North Wales, with its lateral gradations, I had an excellent opportunity of observing during a great Calvinistic Methodist gathering at Mold, Flintshire. On that occasion, at least nine-tenths of the adult men and women presented the following characteristics:—stature various, but often tall—neck more or less long—loose gait—dark brown (often very dark) and coarse hair—eyes sunken and ill-defined, with a peculiarly close expression—dark eyelashes and eye-brows—eye-basins more or less wrinkled. The face was long or rather long, narrow or rather narrow, and broadest under the eyes. There was a *sudden sinking in under the cheek-bones*, with denuded cheeks. The chin was rather narrow and generally retreating, though sometimes prominent. The nose was narrow, long or rather long, much raised either in the middle or at the point, and occasionally approaching the Jewish form (see fig. 5). The forehead was rather narrow but not retreating—the skin wrinkled, and either dark or of a dull reddish-brown hue—the skull rather narrow and rather elongated. (See figures 1, 2, 3, 4.)

Second Type in North Wales.—To the west of Mold, comparatively flat faces begin to make their appearance, and increase in number until in Carnarvonshire they are very common. In this type, as in the last,

the face is broadest under the eyes, with a *sudden sinking in under the cheek-bones*. The nose is sometimes highest in the middle, but more frequently *projecting at the point*. The eyes are sunk and often half closed. The mouth is well formed, with the chin more or less prominent. The forehead in general is broad, high, and capacious. The stature is short or middle-sized, with broad chest and shoulders—the complexion dark, with brown or dark brown hair—the skull broad and approximately square. (See figures 7, 8, 9.)

This type may be traced in considerable numbers along the western part of Wales as far as Pembrokeshire. It is likewise not unfrequent in Central Wales as far east as Montgomery, and it is very common in the West Midland Counties of England. In many parts of South Wales it predominates.

Third Type in North Wales.—Rather full and massive face—decidedly dark and often curly hair—dark whiskers, eye-brows, eye-lashes, and eyes—tall or rather tall and massive frame—skull approximately round. This type, which may be found in small numbers in both North and South Wales, is generally confined to the more prosperous inhabitants. It is not very dissimilar to a type which in Ireland has been called Milesian. It is not uncommon in Monmouthshire, and may possibly be of *Silurian* derivation. (See figures 10, 11.)

Fourth Type in North Wales.—This type presents a greater or less approximation to what I would call the Gaelic type (see sequel). In some places it is strictly Gaelic; in others it graduates into the first or prominent-nosed Welsh type, or into the comparatively flat-faced Welsh type. About Bangor it often presents a resemblance to the Jewish profile. On the occasion of a Criminal Court meeting at Beaumaris, in Anglesea, I observed this type presenting the extreme profile represented in fig. 15. The Gaelic type, however, it ought to be stated, is not very prevalent in Anglesea, or indeed in any part of North Wales.*

Mental Characteristics of the Welsh.—The following characteristics apply only to the first, second, and partly to the third of the Welsh types above described—(the Gaelic peculiarities will be found in the sequel):—Quick in perception—more critical than comprehensive—decidedly adapted to analytical research, and especially to philological and biblical criticism (the foregoing characteristics apply more particularly to the second Welsh type)—*extreme tendency to trace back ancestry*—great genealogists, and by race comparative anthropologists—

* At Beaumaris I met with an excellent specimen of the highest development of the second Welsh type, in the person of John Williams, Esq., solicitor, who is not only an accomplished general scholar, but an eminent theoretical musician, antiquarian, and comparative anthropologist.

poetical as regards the expression of deep feeling, but deficient in buoyancy of imagination—free from serious crimes, and very peaceable, with the exception of a tendency to cherish petty animosities which seldom break out into open hostilities—extreme tendency to religious excitement—economical, saving, and industrious to a fault—temperate, with a strong susceptibility to temptation when brought in contact with, or treated by, the English. The North Welsh, as a people, are decidedly superior to the *mass* of the English population; but the gentry of North Wales are in general behind in mental cultivation.

Among the more serious failings of the Welsh must be reckoned extreme parsimony, which, however, only degenerates into cheating when directed to the Saxon robbers of their ancestors.* The failing most commonly believed to be characteristic of the Welsh is a want of strict regard to truth. This failing, which is by no means so general in Wales as is often represented, I should be inclined to attribute to two causes—first, the existence of contradictory faculties in a Welshman's mind (this remark is most applicable to the second Welsh type). Thus, strong love of approbation may co-exist with equally strong covetousness, so as to lead a Welshman to promise what he either cannot bring himself to perform, or what lies beyond his power. Second, the nature of the Welsh language, which is not well adapted to express minute distinctions between truth and falsehood, and which by its constant use may encourage a tendency to ambiguity. How, it may be asked, can we harmonise a want of precision in the language with the eminence in philological and biblical criticism to which many Welsh scholars have attained? I think it does not follow that the original language of all the Welsh types was what is now called *Cumraeg*. The difference in dialects in various parts of the principality suggests the possibility of the present written or standard Welsh having been super-imposed on the original languages of at least some of the types. I have been informed that the names of many hamlets and farmsteads in North Wales are not *Cumraeg*, but have apparently been derived from a pre-

* The tendency among the inhabitants of some parts of Wales to cheat Englishmen, has been very greatly exaggerated. It is well known that at the inns of North Wales the charges are generally very much lower than in England; and, in the interior of South Wales, I have met with instances of disinterestedness, accompanying a sense of honour, which might be looked for in vain in most parts of England. With regard to Welsh inns, many favourable specimens may be found, not only as regards comfort, order, and systematic arrangement, but likewise as regards the intelligence and high character of the proprietors, throughout all parts of the Principality.

viously existing language. If this be a fact, it deserves to be particularly investigated.

Moral Condition of North Wales.—In most (not all) parts of North Wales, the moral condition of the working classes stands higher than in England. Infanticide is almost entirely unknown, and marriage as a rule is the consummation of what otherwise might be regarded as a reprehensible freedom of intercourse among men and women. The Welsh are too frugal and parsimonious to be guilty of those vices connected with extravagance, which are the very worst failing of the inhabitants of the larger towns of England. Though in certain respects excitable, they care little for those comic and sensational entertainments which, in England, form the keenest enjoyments of the mass of the population. There is likewise but little taste for those field sports which in England are more or less associated with gaiety. The Welsh are in general strangers to luxurious living, and many large villages might be mentioned with only one or two public houses, and these indifferently supported. The social order observable in some villages and towns can scarcely be exaggerated. Behind my apartments in Denbigh there was a row of cottages inhabited by men, women, and children, but so quiet* were the inmates, that after 9 p.m. I do not recollect having heard a single sound proceeding from these cottages during three weeks, excepting a hymn-tune on a Sunday. The village of Glan Ogwen, misnamed Bethesda, near the Penryn slate quarries, would, in England, be considered a model village, as regards order, quietude, temperance, and early hours. Reading, music, and religious meetings monopolise the leisure of the inhabitants. Their appreciation of the compositions of Handel, and other great musicians, is remarkable; and they perform the most difficult oratorios with a precision of time and intonation unknown in any part of England, except the West Riding, Lancashire, Worcester, Gloucester, and Hereford.

Music in North Wales.—The musical ear of the Welsh is extremely accurate. I was once present in a village church belonging to the late Dean of Bangor,† when the choir sung an anthem composed by their

* A traveller who expects to find in a Welshman the brother of an Irishman, is often surprised at the taciturnity characterising the former. In some parts of Wales, I have noticed this taciturnity prevailing to a very great extent, especially among the women. With them, even to smile is a very rare occurrence.

† It would be difficult to single out a dignitary of the Church of England, at any period of its history, who so completely devoted himself to the social, intellectual, and moral improvement of the people, as the late Dean of Bangor. His humility and activity were alike unbounded; and to the deepest reverence for things sacred he united the most brilliant conversational talent. He once assured me that the Welsh language is not nearly so un-

leader, and repeated an unaccompanied hymn-tune five or six times, without the slightest lowering of pitch. The works of Handel, Haydn, Beethoven, and Mozart, are republished with Welsh words at Ruthin, and several other towns, and their circulation is almost incredible. At book and music shops of a rank where in England negro melodies would form the staple compositions, Handel is the great favourite; and such tunes as *Pop goes the Weasel* would not be tolerated. The native airs are in general very elegant and melodious. Some of them, composed long before Handel, are in the Handelian style; others are remarkably similar to some of Corelli's compositions. The less classical Welsh airs in 3-8 time, such as Jenny Jones, are well-known. Those in 2-4 time are often characterised by a sudden stop in the middle or at the close of a measure, and a repetition of pathetic slides or slurs. The Welsh are so musical that most of the Calvinistic Methodist preachers intone instead of merely delivering their sermons.

Religion in North Wales.—The Welsh, especially the North Welsh, are very religious, and the statistics of the country demonstrate that religion has done much to improve their moral condition. For every one who attends a place of worship in the more Scandinavian districts of England there are at least eight in North Wales. The religion is chiefly Calvinistic Methodism, which affords scope for the exercise of excited feeling and emotion. The Welsh are naturally a dramatic people,* and with them religious services are often converted into solemn dramatic entertainments. While at Llangollen I heard of a celebrated Welsh divinet† (blind in one eye) opening a chapel on a wild hill-side not far from Bala lake. The subject was the progressive development of the Christian scheme from Adam to the final judgment. The prophets were made *dramatis persona*, and the preacher represented them rising from the dead, appearing on the stage of time at the last day, and vindicating the correctness of their predictions concerning the Messiah.

Remarks on South Wales.—The first-mentioned, or long and high-

musical as is commonly supposed, and that he had no difficulty in getting Welsh children to pronounce such words as *lions* and *tigers* with great elegance; but that, in Nottinghamshire, he never succeeded in getting young persons to pronounce these words otherwise than as *toyons* and *toygers*.

* I cannot resist the belief that Shakespeare, if not a Welshman, was more allied to the Cymrian type, or one of its lateral variations, than any other type yet classified. In his native district, at least half of the inhabitants differ very little from the Gaelic-British and Cymrian-Welsh. To call Shakespeare a Saxon, would be to show a total ignorance of the science of races; though I should not like to be too confident in asserting that he was not a Dane.

† See Fig. 10.

featured physiognomy of North Wales (which, for convenience, I shall call CYMRIAN) becomes flatter and shorter as we proceed southwards through Central Wales, until in most parts of South Wales the comparatively flat-faced or second type (which I shall call BRITISH) is found to preponderate. This style of physiognomy is generally accompanied by very broad shoulders. The late eminent antiquarian, Archdeacon Williams, once informed me that about the time of the French Revolution 1,000 Cardiganshire volunteers were found on a certain occasion to take up as much room as 1,200 Midland County men (Angles and Danes?) In Glamorganshire and other parts of South Wales, I observed that, in addition to the above type, a large proportion of the inhabitants (chiefly the working classes) presented a greater or less approximation to what I have called the Gaelic physiognomy with the under part of the face projecting forwards.* (See figures 12, 13, 14.) This accords with the opinion of a very intelligent prize historian (Mr. Stevens, chemist, Merthyr Tydvil) that the first traceable inhabitants of Wales were Gaelic Britons, and that the Cymri from Strathelwyd† on entering Wales drove the pre-occupants to the South. The native music of South Wales is likewise to a great extent Gaelic, or similar to what we find in the more Gaelic districts of Scotland and Ireland—that is, in 6-8 time, and in the minor mode, with an ascending as well as descending flat sixth and seventh.

The mental characteristics of the South Welsh include these already stated in connection with the inhabitants of the North; but in most parts of the South the people differ from the North Welsh, and their dialects likewise differ. This may arise from the amount of Gaelic and British blood in the South, and from the extent to which the coast has probably been colonised from the south-west of Europe. Generally speaking, the South Welsh, though often very taciturn, are more excitable than in the North—more given to extremes—less orderly—and more divided among themselves. The Glamorganshire men have an antipathy to the Cardiganshire men, and other tribes are mutually at variance. In Caermarthenshire the people are very intellectually disposed. The chief ambition among young men in that county is to become speakers or preachers, and the congregational pulpits of England are largely supplied from Caermarthenshire and the neighbourhood. In the peninsulas, such as Gower, the descendants of Teutonic, chiefly

* About Merthyr Tydvil, a profile about midway between Gaelic and British seemed the most prevalent. See Fig. 6. One very occasionally meets with Fig. 16 in South Wales.

† A district lying between the rivers Clyde in Scotland, and the Mersey in England. Mr. Stevens has proved that some of the best Welsh poems were composed in Strathelwyd.

Flemish, colonists, may be found. It has been remarked that they make very much better sailors than the Welsh. The history of Pembrokeshire, or "Little England beyond Wales," is very well known.* I have been assured that the boundary line between the Flemings and Welsh is still sharply defined.

Along the borders of North and South Wales the people are more naturally intellectual than in any other part of England; Hertfordshire, Essex, Cambridgeshire, and Hampshire, perhaps excepted. In a long district running between Taunton and Oswestry—extending as far west as Hay, and as far east as Bath and Bewdley, science, especially geology, receives at least ten times more attention than it does in any other equally-sized area. This conclusion I have arrived at from personal observation, and it is corroborated by the comparative number of Fellows living in this district whose names may be found in the list of the Geological Society. It is difficult to explain this fact without supposing it to be connected with the Welsh derivation of many of the inhabitants, who may be regarded as Anglicised Welsh. It cannot arise from superior elementary education, for that is defective throughout the greater part of the district. Neither can mining pursuits be the cause, for the working miners are not the most intelligent part of the population. In the adjacent parts of Wales where English is spoken, we likewise find a greater taste for solid knowledge than in the heart of England. The little and poverty-stricken town of Montgomery, with its immediate neighbourhood, contains more than a dozen thoroughly informed and deep-thinking geologists; whereas a traveller might visit a dozen towns of the same size in Leicestershire, Lincolnshire, or East Yorkshire, without meeting with a single geologist. Ludlow, on the Welsh borders, possesses the best local geological museum in England.

Types in the West and South-West of England.—A considerable proportion of the inhabitants of the West Midland and South-western counties are scarcely distinguishable from three of the types found in Wales, namely the British, Gaelic, and Cymrian. In Shropshire, and

* The following history of settlers in Gower and Pembrokeshire is the most satisfactory I have been able to obtain:—In 1099, Henry Beaumont, Earl of Warwick, planted a colony of Somersetshiremen in Gower. About the year 1106, a tremendous storm carried away embankments and sand hills, allowing the sea to overflow a great tract in Flanders. A numerous body of the inhabitants sought refuge in England. They were first admitted into the northern counties; but, disagreeing with the English, they were removed to the district of Roos in Pembrokeshire. They are said to have afterwards disappeared. In the time of King Henry, a second body of Flemings came into England, and the king, wishing to oppose the power of Gryffydd ab Rhys in South Wales, sent them into Pembrokeshire.

ramifying to the east and south-east, the Cymrian* type may be found in great numbers, though not predominating (see *Anglian*). It seems probable that among the earliest inhabitants of the West and South-West of England, Britons, Gaels, and Cymri greatly preponderated. The Britons, either identical or mixed with Prehistoric Finns, may have been the first inhabitants. The Gaels may have come next, and then the Cymri. An Anglian element (from the east) and a Norse (from the north-west†) must, at a later period, have been superimposed on the previous compound population. In many parts of the south-west, and, at intervals, along the south coast, the prevailing type among the working classes is decidedly Gaelic. It may have come from Gaul, and the terms Gael and Gaul may be ethnologically synonymous. But it is certain that it not only prevails in the parts above-named, but in a more exaggerated, or in some places more mitigated form, in the Highlands of Scotland and in the greater part of Ireland. As already mentioned, it exists in South Wales, but North Devon and Dorset may be regarded as its head quarters in South Britain.

Gaelic Physical Characteristics.—*A bulging forwards of the lower part of the face*, most extreme in the upper jaw; chin more or less retreating (in Ireland the chin is often absent); forehead retreating; large mouth and thick lips; *great distance between the nose and mouth*; nose short, frequently concave, and turned up, with yawning nostrils; ‡ cheek-bones more or less prominent; eyes generally sunk, and eyebrows projecting; skull narrow and very much *elongated backwards*; ears standing off to a very striking extent; very acute in hearing; slender or rather slender

* In Lancashire, and probably farther to the north, many words are of Welsh derivation. Besides Cymrian, the people of Lancashire would appear to be to a great extent Anglian (?) and Scandinavian.

† Worsaae's *Danes and Norwegians in England*, etc.

‡ In a large school at Tiverton, Devonshire, at least nine-tenths of the boys presented the most exaggerated Gaelic physiognomy, with gaping nostrils. It is a remarkable fact, that not one out of a thousand of the inhabitants of the North of England (apart from the Irish in towns) presents any approximation to the Gaelic type. The North of England nose is almost invariably thin, high, and sharp, with small nostrils. Archbishop Whateley, in his *Notes on Noses* (Bentley), is quite right in regarding this as an anti-cogitative nose, for the North is more characterised by activity than contemplation, and the people generally show a great indisposition to settle down to quiet meditation. The archbishop, in the above work, tells us, on the authority of the *Edinburgh Review*, that "there are certain districts in Leitrim, Sligo, and Mayo (as pointed out by an intelligent writer in the *Dublin University Magazine*), chiefly inhabited by descendants of the native Irish, driven by the British from Armagh and the south of Down about two centuries ago. . . . These people are especially remarkable for open projecting mouths, with prominent teeth (*i. e.* prognathous-jawed—the negro type), their advancing cheek-bones, and depressed noses, etc."

and elegantly formed body ; stature short or middle-sized, though in some districts tall ; hair brown or dark brown, and generally straight. There would appear to be two sub-varieties of this type, the one above described, and another with fair complexion, and red or light brown hair.

Gaelic Mental Characteristics.—*Quick in perception*, but deficient in depth of reasoning power ; headstrong and excitable ; tendency to oppose ; *strong in love and hate* ; at one time lively, soon after sad ; vivid in imagination ; extremely social, with a *propensity for crowding together* ; forward and self-confident ; deficient in application to deep study, but possessed of *great concentration in monotonous or purely mechanical occupations*, such as hop-picking, reaping, weaving, etc. ; want of prudence and foresight ; *antipathy to seafaring pursuits*, in which respect they contrast very strongly with Norsemen and Frisians ; veneration for authority.

In Exeter and the neighbourhood, the Gaelic type (with both fair and dark complexions) is very prevalent ; and with the exception of a type approximating to the Saxon, the population may be said to consist of Gaels, and a well-marked race with very dark hair, high forehead, Roman nose, thin lips, and prominent chins.*

In several parts of England to the south of the Thames, a type may be found predominating to which I shall apply the term Saxon. Its characteristics accord with local traditions concerning the ancient Saxon, and it is similar to a type still prevailing in many parts of Germany, to which no name but Saxon can well be applied. The localities in England where it most intrudes itself on the traveller's attention are very nearly those where Saxons landed according to history, or to which Saxons may conveniently have migrated. These localities may be stated as follows :—the Isle of Selsea and the neighbourhood of Chichester,† the district extending between East Grinstead and Hastings, chiefly in Sussex, but including the neighbouring part of Kent, the valley of the Hampshire Avon as far as Salisbury and the neighbourhood, the West of Berkshire,‡ especially the White Horse

* This race is likewise to be found in Cornwall. But the Cornish chiefly consist, first, of Gaels with dark or brown hair ; second, a race with a rather short angular face, somewhat like the second Welsh type ; third, a race more or less hatchet-faced ; and fourth, a race with a very Spanish-looking physiognomy.

† At the national school of Bersted, near Bognor, I observed that nearly all the girls presented the most decided Saxon physiognomy. In many parts of England there are large schools in which not a single Saxon face can be found.

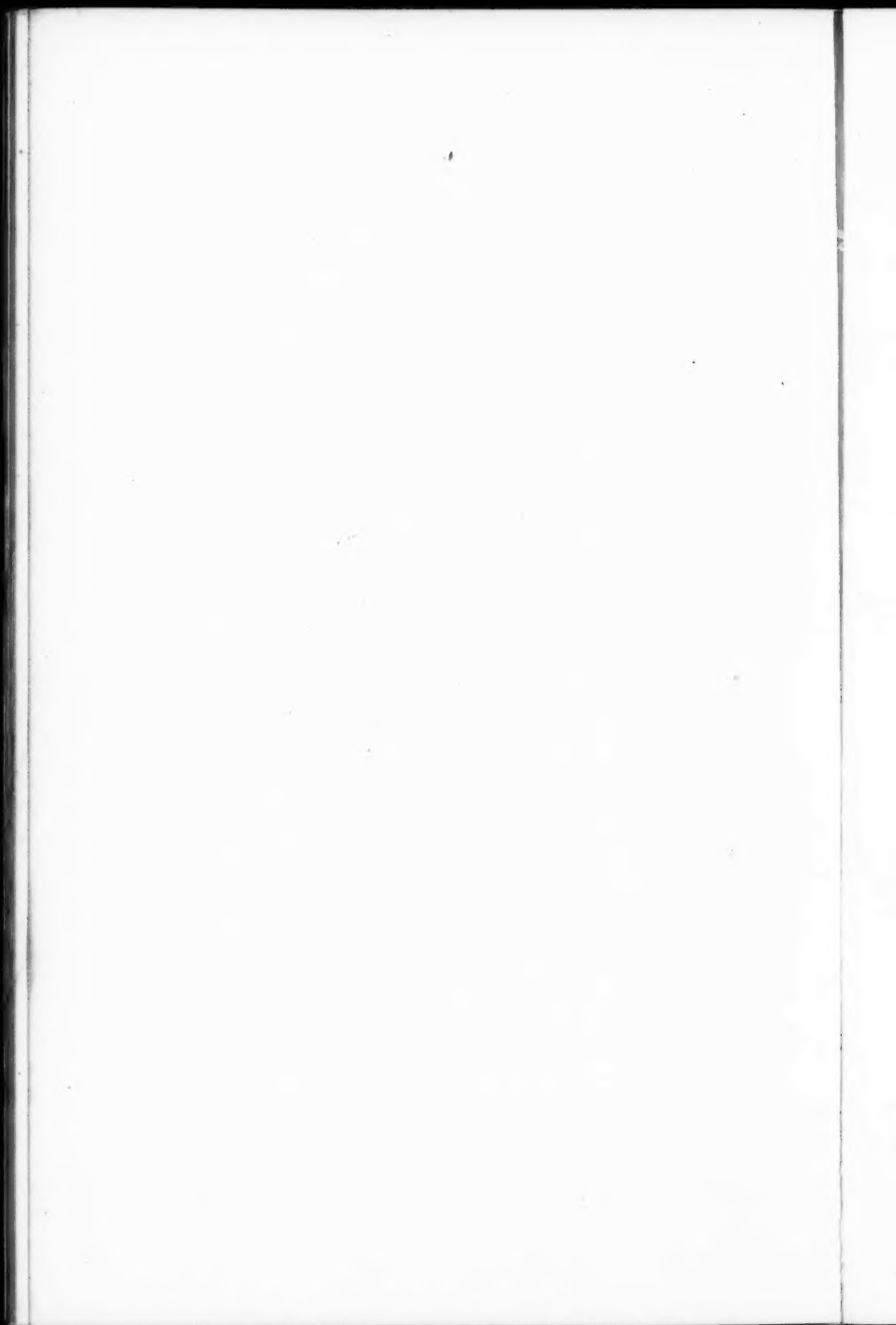
‡ The Saxon hock-tide sports are still kept up in Hungerford and the neighbourhood.

MAP TO ILLUSTRATE
THE
COMPARATIVE ANTHROPOLOGY
OF
ENGLAND AND WALES.

BY
D. MACKINTOSH, F.G.S.

The areas are not coloured, because the boundary lines cannot be precisely defined.





Valley and vicinity. But Saxons may likewise be found in considerable numbers, though not always predominating, in the interior of the Isle of Thanet, the south of Dorsetshire, the east of Devonshire, the greater part of Somersetshire, and likewise in the East Midland Counties.

Saxon Physical Characteristics.—*Features excessively regular; face round, broad, and short or rather short; mouth well formed, and neither raised nor sunk; chin neither prominent nor retreating; nose straight, and neither long nor short; under part of the face a short ellipse; low cheek bones; eyes rather prominent, blue or bluish-grey, and very well defined; eyebrows semicircular, horizontally, and not obliquely placed; forehead semicircular, and skull of a shape midway between a parallelogram and a round, flat above the ears, and small in the occipital region; flattened ears; hair light brown; chest and shoulders of moderate breadth; tendency to rotundity and obesity,* especially in the epigastric region; short and round limbs, hands and fingers, general smoothness and roundness; total absence of all angles and sudden projections or depressions.* See fig. 19 (a Chichester Saxon), figures 20, 21.

Saxon Mental Characteristics.—Extreme moderation; absence of extraordinary talents, and equal absence of extraordinary defects, mind equally balanced; character consistent, simple, truthful, straightforward and honest; persevering in pursuits admitting of variety, but unadapted to purely mechanical or monotonous occupations; predilection for agriculture; determined, but not self-willed; self-reliant yet humble; peaceable, orderly, unexcitable, unambitious, and free from extravagance; not brilliant in imagination, but sound in judgment; great general benevolence accompanying little particular attachment; tendency to forget ancestors, to care little about relatives, and to have limited intercourse with neighbours.

The term *Anglo-Saxon* has little or no meaning in the present state of English anthropology, unless it be strictly limited to a combination of the Saxon and Anglian types. But some of the mental peculiarities commonly assigned to the supposed Anglo-Saxon, are quite as applicable to the Dane as to the Saxon; and in all political orations in which the word *indomitable* is used it ought to be coupled with *Dano-Saxon* instead of *Anglo-Saxon*.

Is there an Anglian Type in England?—Some suppose that the Anglian colonists of East Anglia, Mercia, Deira, and Bernicia,† were

* Numbers of very rotundiform and massive Saxons may be seen in the markets of most of the towns of Sussex, West Berkshire, etc. In Northampton market, a very Saxon-looking race, but taller and darker in complexion than the strictly typical Saxon, may be seen predominating.

† According to the best historians, in 527 and afterwards, Angles arrived

mere handfuls in comparison with other settlers from the Continent. Bede, on the contrary, asserts that the Anglian province in Jutland was laid waste by the extent of the emigration. I have not been able to trace a very well defined type to which the term Anglian can be exclusively applied, but a race not very dissimilar to Saxon, though in some points peculiar, and which looks like a lateral variation of the Saxon type in the direction of both Dane and Norwegian, may be found in great numbers, especially among the women in the following districts:—Suffolk, and parts of Norfolk, Cambridgeshire, Hertfordshire, Bedfordshire, Northamptonshire, Buckinghamshire, parts of Oxfordshire, Warwickshire, South Staffordshire, Shropshire, the east of Derbyshire, the west of Leicestershire and Nottinghamshire, and a zone running north through the West Riding of Yorkshire into Durham.

Anglian (?) Characteristics.—The characteristics which may be provisionally termed Anglian are the same as Saxon, with the following exceptions:—face rather longer and narrower than the Saxon; cheek-bones slightly projecting; chin varying from rather prominent to rather retreating, and more or less approaching angularity; nose narrower and more elegantly chiselled than the Saxon, and the nostrils more compressed; frame much more slender than the Saxon, with narrow shoulders, long neck, and erect figure; hair of a more golden or yellowish hue than the Saxon; complexion exceedingly fair, with more or less of a pinkish hue; in mental character more active, determined, and ambitious, than the Saxon; deficient in the more disinterested tendencies of human nature, and dull in those faculties which elevate man above the necessary affairs of life, but pre-eminently adapted to make the most of the world. Figures 17, 18, 22, are from Anglian districts.

Frisians (?) and Jutes.—In the east-midland, eastern, and south-eastern counties of England, we frequently meet with a physiognomy

in Norfolk and Suffolk (East Anglia). In 547 a more numerous body arrived, under Ida, in the district between the Tyne and the Forth (Bernicia), and afterwards spread farther to the south. In 560, Angles arrived under Ella, and settled in the country between the Tyne and the Humber (Deira). In 585, Angles under Crida arrived in the midland districts of England (Mercia). It is stated in one or more Directories of Shropshire and Staffordshire (I cannot ascertain on what authority), that the English settlers were divided into families or tribes, with the following names:—The Harling, Horning, Hanning, Willing, Elling, Whitting, Totting, Patting, Holling, Essing, Hunting, Copping, Eding, Rolling, Darling, Wiggling, Bucking, Winning, Stalling, Tibbing, Packing, etc. How far this may be correct, I am not prepared to say; but it is certain that numerous names of places, apparently referable to the above or similar tribes, may be found in the midland counties, particularly in Shropshire. I think it probable that *ton* (as in Whittington) is more especially, though not exclusively, an *Anglic* termination.

which is neither Saxon nor Danish, and which is similar to a prevailing type in many parts of Friesland. The face is narrow, and the features prominent, but the profile is not so convex as in the type next to be described. The complexion is fair, and the hair light brown. The skull is narrow, high at the spot called firmness by phrenologists, and low in veneration. (See fig. 24.) The mental character is chiefly remarkable for extreme self-complacency, and independence of authority. In Kent, this type graduates into a much more strikingly-marked type, to which I shall provisionally apply the term JUTIAN, as it is found in Kent and the eastern part of the Isle of Wight—localities which, according to Bede, were colonised by Jutes. On walking from Ryde to Brading, in the Isle of Wight, one evening, I met numbers of men returning from work, and in almost every instance they presented the under-mentioned peculiarities. I found the same type predominating in the neighbourhood of Brading, and likewise in West Kent, especially about Tunbridge.*

Jutian Characteristics.—*Very convex profile*, so that if one leg of a pair of compasses were to be fixed in the ear, the other would describe not only the contour of the face, but of the skull (see Fig. 25); cheek bones slightly projecting; nose sinuous; and rather long; dull complexion, and brown hair; grey or bluish-grey eyes; narrow head, and face more or less narrow; long neck, narrow shoulders and chest; frame broadest at the trochanters; springing gait; often tall, especially in the Isle of Wight; extremely adapted to the practical affairs of life; tendency (still greater than in the Saxon) to manifest indifference to ancestors, relatives, and neighbours.

In North Kent, the Jutian graduates into the Danish type. Concerning the latter, I have no remaining doubt, as it decidedly preponderates in those parts of England where Danes must have settled in the greatest numbers. It is to be met with more or less in all the midland counties; in Lancashire, Westmoreland, Cumberland, Northumberland, and Durham; but chiefly in the North and East Ridings of Yorkshire, Norfolk, Suffolk, and, above all, in Lincolnshire.† In

* Mr. Roach Smith has found that the sepulchral remains of Kent and the Isle of Wight are similar, and that they are different from Saxon strictly so-called. In Kent, I have heard of old songs and traditions which imply that the inhabitants did not formerly regard themselves as Saxons.

† The termination *by*, in names of places, has been pointed out by Dr. Latham and others as exclusively Danish. It is well known that an immense number of names in Lincolnshire have this termination; but many, perhaps, are not aware that in the north-east of Leicestershire it is quite as common. The following is a list of names terminating in *by* in Melton Mowbray union:—Ab-Kettleby, Asfordby, Ashby-Folville, Barsby, Brentingby, Wyfordby, Brooksby, Dalby, Freeby, Frisby, Gaddesby, Gradby,

the latter county, I have been at some pains to collect the characteristics of the inhabitants, and before proceeding to a detailed statement, I must remark that a frequently-observed variation from the predominating profile consists of a sunk mouth and prominent chin (instead of a rather prominent mouth and rather retreating chin). I have often thought that this variation in certain parts of the physiognomy in the same race (the other physical peculiarities being the same) may be part of a law calculated to secure sufficient individual differences in families, without the typical limits being transgressed.

Danish Physical Characteristics.—*Long face* and rather coarse features; *high cheek bones, with a sudden sinking in above on each side of the forehead*; *high and long nose*; rather prominent mouth, and rather receding chin (see preceding section); skull narrow, elongated, and increasing in width backwards; large occipital region; high in what phrenologists call *self-esteem, firmness, and veneration*; long neck, and low, rather narrow shoulders; stature various, but in general tall; *swinging gait*; hair either yellowish flaxen, yellow, *red*, auburn, chestnut, or brown with a reddish tinge; whiskers generally red; grey or bluish-grey eyes; *ruddy complexion*. (See figs. 27, 28.) Fig. 26 is a mitigated form of Danish face common in all Danish districts.

Danish Mental Characteristics.—*Sanguine*, active and energetic, with a tendency to be always doing something, which often leads into scrapes; determined, courageous, and *ambitious*; *proud*, vain, and ostentatiously benevolent; high sense of honour; warm in love or hate; obliging and hospitable; tendency to extravagance in eating and *drinking*; *very social and convivial*; talent for practical science, but deficient in depth of thought, or adaptation to philosophical studies; *good speakers but bad listeners*; tendency to apply inventions to pecuniary advancement; capacity for pushing *on external or material civilisation*. A well educated Dane is an ornament to society. An ignorant Dane stands very low in the anthropological scale.

Norse Districts of England.—Names of places and persons, dialects and history, would lead us to expect a Norse element in the population of Cumberland, Westmoreland, parts of Lancashire, and the northern parts of the West Riding of Yorkshire. Indications of the same element are not perhaps wanting in other parts of England.* I

Harby, Hoby, Kirby-Bellers, Rotherby, Saltby, Saxby, Saxelby, Somerby, Stonesby, Sysonby, Wartnaby, Welby.

* The Staffordshire clog, several specimens of which have been found (see *The Reliquary*, by Llewellyn Jewitt, Esq., F.S.A., Derby), consists of a piece of wood, with marks on the edges. and Runic symbols. It is generally attributed to Norwegians.

have searched, especially in Cumberland, for a type or types to which the term Norse may be applied. But in addition to Cymrians and Danes, I have not met with any extensively prevailing type except the following. Face rather flat, chin angular and rather prominent, mouth well formed and frequently depressed. Nose high, but not so long as in the Dane; cheek bones often a little projecting, eyes grey, forehead square, and head a short parallelogram;* neck rather short, and shoulders rather broad; *stature generally tall*; complexion among the men ruddy, and hair either brown or sandy; *whiskers generally sandy*; complexion among the women fair, with a lily or *pinkish* hue; good mental abilities, and, with sufficient inducement to cultivation, capable of attaining a high intellectual rank, but very deficient in precocity; practical, orderly, and cleanly; *obliging* to an unparalleled extent, though not free from suspicion; *honest* to an extreme perhaps unknown among any other race in England. The proof of this honesty may be found in doors not being locked during night—in the absence of imposition at inns and lodging-houses—in disdaining to take advantage of strangers—in making no charge for small services—and in refusing any return for favours bestowed. The latter peculiarities may likewise be regarded as resulting from that sense of honour and independence of mind by which the Norsemen in all ages have been characterised.†

In the foregoing survey of the comparative anthropology of England and Wales, I have left anatomical details out of consideration, because I have found it necessary to confine attention to a particular line of observation in order to retain sufficiently distinct impressions, and because I have no doubt Dr. Barnard Davis, who has taken up the anatomical department, will soon be able to connect it with the evidence furnished by physiognomy and mental characteristics. The colour of skin, hair, and eyes, is likewise a subject on which I have touched very briefly, as that may be more profitably left in the hands of Dr. Beddoe. As we may learn from the history of geology, it will not be until after the results of distinct lines of investigation have been grouped and generalised, that we can succeed in establishing fundamental principles on which the superstructure of comparative anthropology can be safely erected.

* I have refrained from giving any decidedly illustrative portrait of the Norse type, as I have not been able to meet with any furnishing a satisfactory average representation. Fig. 23 is not uncommon in the Scandinavian districts of the north of England.

† Worsaae is correct in his assertion, that the inhabitants of Cumberland are extremely addicted to litigation.

THE ROMAN AND THE TEUTON.*

HISTORY has ceased to be a chronicle. It is no longer even a series of elegant biographies or eloquent dissertations. It is beginning to be a science. We want proof as to its premises, and demand logic in its deductions. The mere scholar is no longer adequate to its composition. It not only demands attainments of which he is devoid, but also habits of thought with which he is scarcely familiar. To write history well requires a faith in first principles; in truth, the subjection of the mind itself to the law of order. Now it is here that the scholar fails. He is accustomed to deal with the concrete rather than the abstract, with the individual rather than the universal. To him at best, history is but the rise and fall of nations, not the movement of races. He cannot eliminate the accidental, by regarding it as a perfectly normal phenomenon, subject even to the cyclical law of repetition. He is the slave of appearances. He numbers the waves while neglecting the tides. He does not know that there is "a law of storms" in the moral as in the physical world. He cannot be made to understand that the occultations and eclipses of the one are as periodical as those of the other. He sees the leaves falling and the fruit ripening at their due season, but he does not seem to comprehend that the mystic tree Ygdrasil, also sheds its leaves and casts its fruit, even though they be the very stars of heaven, when the eons have told out their period of duration.

We have been led into these remarks by the introduction which Mr. Kingsley has prefixed to his lectures, and which we think, both for his own sake and for the cause which he represents, had better have been omitted. It is simply an illustrious instance of clerical logic, a magnificent pile of well-meant arguments, based on the untenable foundation of purely gratuitous assumptions. Had it come from Oxford we should not have been surprised, for it is in perfect keeping with her (late) mediæval proclivities, but we were certainly not quite prepared for the announcement of such views by a Professor of Cambridge, the *alma mater* of Bacon and Newton. But we presume Mr. Kingsley's utterances about suspended gravitation, and other matters of similar import, must be regarded as a manifesto of the literate and not the scientific section of this University, and as such may be allowed to pass without further comment.

The subject of Mr. Kingsley's work is certainly most important. The

* *The Roman and the Teuton.* By Charles Kingsley, M.A. Cambridge and London: Macmillan and Co. 1864.

Teuton and the Roman almost divide European history between them. For the annals of Greece are but a prelude, while the traditions of the Celts are lost in the mist of a prehistoric antiquity. The Latin and the Gothic peoples have held the stage in succession for two thousand years, and to a large extent modern civilisation is what they have made it. Politically we are Romans, socially we are Teutons. In the South of Europe Italic influences still preponderate both in creed and custom, while in the North and West the Gothic element has successfully reasserted its olden independence. In a sense modern history is but a narration of this racial interaction, and it was quite right therefore that the Professor of this department should favour us with his matured conclusions on the subject.

To understand the rise of Roman power we must not contemplate it as an isolated phenomenon. It was simply a tidewave in the north-western march of empire, from the plain of Shinar to the shores of Britain. Its more especial function was the summation of ancient preparatory to the birth of modern civilisation. History undervalues the mission of the classic race. The empire of Alexander is the area of Islam, the realm of the Cæsars is the domain of Christianity. Such facts speak volumes. They show that humanity has never rolled back to the antique standpoint, despite what Turk and Teuton could accomplish in the way of re-establishing that barbarism, which is proper to a predominantly muscular type, more especially at their uncultured stage of development.

Contemplating Christianity through the supernatural medium, we have exaggerated its historical importance. We have regarded it as an entirely exceptional phenomenon in human affairs, as an advent for which there was no preparation, and a movement to which there could be no conclusion. We have presumed upon its being miraculous, and have consequently not held it as amenable to the doctrine of forces. To speak of it as in any measure a result of Roman civilisation would, till very recently, have been held as absolutely impious, and even now the public are by no means prepared to hear that it was a purely historical development. The sequence and generation of creeds seem to be but imperfectly understood, yet it is obvious that a law underlies this process, as regular in its operation as any other in the whole domain of nature.

It will be readily understood that the foregoing views are not precisely in accordance with those of Professor Kingsley. He does not believe in the *supremacy* of law, though he admits its *existence*, or rather he does believe in the supremacy of an *undiscoverable* law—for the production of men of *genius*—who, naughty creatures, fatally disturb all possible calculation, as to the probable order of events. That the man

of genius, whether a Gautama or a Mohammed, a Luther or a Shakespeare, a Cromwell or a Napoleon, is a befitting response to the wants of humanity, that he accurately answers to its necessities, and adequately fulfils its demands, is apparently not enough for him. He is still haunted with the idea of something *accidental* in his production, and although he does not say, in so many words, that he is abnormal, but rather the very reverse, yet he does so in effect, by declaring that all ordinary men, the rank and file are so! Now all this is, to say the least of it, very foolish. It is utterly unphilosophic. A Bacon in his study and a ploughman between the stilts, are equally normal, each in his own grade. The one is as much an instrument of providence, or shall we say an individual organ of the universal mind, as the other. The one does not do more, and the other does not accomplish less than is required of him. They are perfectly harmonious parts of the great whole of human society, and severally discharge their respective functions, in the time and manner required for its growth and well-being. Mr. Kingsley's harassing doubts on this subject, like those of many of his less enlightened brethren of the cloth, appear to us to arise from a want of *living* faith, that is, faith in the now. They cannot, it would seem, realise the sublime truth, that all action is a miracle and all thought an inspiration, and that as a result of this, divine order and celestial beauty, are ever in the process of evolution, at all times and in all places, in the storm and the calm, through the volcano and the earthquake, under the darkness of the eclipse and in the noontide splendour of the sun's meridian power. To attain to this, however, we must believe not only in a *past* but a *present* revelation, not only in a deity that *was* but in a God that *is*.

If we wanted a striking instance of the disturbing effect of a belief in the miraculous even on a very superior mind, we do not know that we could select one more to the point than that which is furnished by this very work of Mr. Kingsley. There is a looseness of thinking in it, absolutely astounding. Witness the following in his first lecture on "The Forest Children". He is speaking of the conquest of the Roman Empire. "But the Teutons might have done it a hundred years before that, when Rome was in a death agony, and Vitellus and Vespasian were struggling for the purple, and Civilis and the fair Velleda, like Barak and Deborah of old, raised the Teuton tribes. They might have done it before that again, when Hermann slew Varus and his legions in the Teutoburger Wald; or before that again, when the Kempers and Teutons burst over the Alps to madden themselves with the fatal wines of the rich South." Now if there be any one fact in ancient history more patent than another, it is that Rome had a cycle of growth, splendour, and decay, and to suppose that she could have been over-

whelmed, as by an unlucky accident, in the earlier stages of this process, is equivalent to saying that winter might come at midsummer, or the moon suddenly wane from her full-orbed splendour. Mr. Kingsley is surely not ignorant of the great fact, that the Teutonic invasion was not an isolated incident, but part of a mundane movement, which embraced both Europe and Asia, and set not only the Goth, but also the Hun, the Tartar and the Mongol in motion, and so changed the masters of the world from India to Britain. "The human deluge," as he very properly terms it, was a tidal movement of humanity, having its appointed times and seasons, and so not to be hurried or retarded by any accident. The process was essentially ethnic, and consisted in the baptism of the effete nervous races by their muscular correlates. It was what had been done before, and will some day have to be done again, for the tides of the moral like those of the material ocean, repeat themselves periodically.

Now there is no one who knows all this better than the professor of modern history. Of Mr. Kingsley's attainments we have the very highest opinion, and of his talent none can doubt. Yet his unfortunate habits of thought go far to render nugatory, not only his learning but even his commanding ability. He belongs to the school of detail. He paints individualities with pre-Raphaelite minuteness and fidelity, but he has a paralysing distrust of law and principle. His mind is essentially feminine. It is great in the small. It has exquisite finish, but it is sadly wanting both in depth and breadth. He cannot grasp the totality of a great historical event. He is lost in the parts, and we may add, confused amidst effects, which he often mistakes for causes. He is, moreover, too prone to moralise; a venial fault, however, in a reverend professor addressing a class of promising young undergraduates. He is the very antipodes of Buckle, that magnificent pedant of statistics, that amiable fanatic of averages. In *The History of Civilisation* men are pawns on the chess-board of fate. In the Teuton and Roman they are clay in the hands of the clerical potter. Mr. Buckle believed in the omnipotence of circumstances. Mr. Kingsley has unbounded faith in the efficiency of morals. Each doubtless has a side of truth, but neither has the whole truth, which does not however lie between but above them.

The rise and fall of empires are not only phenomena developed in perfect obedience to law, but their minuter accessories are also subject to cyclical repetition. The stern virtues of the conscript fathers in the early days of the republic, and the abandoned profligacy of the senatorial families under the later emperors, are not matters for astonishment; such transcendent virtues and such unutterable vices were the normal product of a powerfully organised and decisive race, pass-

ing over the tremendous arc of ascension into and declension from the imperial supremacy of a world. The Babylonians, taking into account the diversity of race and area, had doubtless passed through much the same cycle of fortune and morals in a previous era. Indeed, the destruction of the great Assyrian monarchy by the Persians and Kurds under Darius and Cyrus, had its later parallel in the conquest of the Roman empire by the comparatively pure and simple and vigorous Goths, under Alaric, Odoacer, and Theodoric.

We have yet to learn the effect of high civilisation upon structure and function. It is obvious that it has a marked and hereditarily transmissible effect upon the nervous system, and through it doubtless upon the osseous and the muscular. It increases the susceptibility to pleasure and pain, and apparently eventuates in a morbid development of the passions. While a refining, it is obviously an exhausting process. It is doubtful if humanity be capable of enduring it in perpetuity. It never has done so hitherto. India and Egypt, Assyria and Persia, Greece and Italy, are eloquent as examples in the past. It would be unwise to vaticinate, so we will only say that the fortunes of modern Europe are in the keeping of futurity.

The fall of Rome certainly presents a great problem, more especially for clerical moralists like our author. Its people no doubt became exceedingly corrupt under the old heathenism, not however till that heathenism was itself effete. When thus corrupt, however, it is obvious that Christianity utterly failed to regenerate them. That could only be accomplished by the natural and normal process of an ethnic baptism. It was not Christianity, but the Goths that restored Southern Europe to virility after the exhaustion of an era of imperial civilisation. Thus showing how irresistible are the natural laws, which fulfil themselves under all circumstances, and in despite of, apparently, the most unfavourable and exceptional conditions. The truth is, Christianity itself was a part of the invasion, Olympus, like the Palatine, going down before the resistless deluge. The Cæsar and the Jove grew old together. The classic man was expiring, not merely in his government but also in his faith. It was the night of death preparatory to the morning of resurrection.

History has not yet done justice to the Teuton. It is only in the process of doing so. It has contemplated him too much through Roman and monkish spectacles. It has scarcely appreciated his manhood. It has decidedly underestimated his civilisation. We have talked of his forests, till we have forgotten his corn-fields, and spoken of his feats as a hunter, till we have overlooked his labours as a herdsman. We have believed that well-equipped and disciplined armies, with all their weapons, clothing, and commissariat, could come

out of the wilderness, or what is yet more incredible, that naked barbarism could defeat the legions and storm the cities of a well-organised civilisation. It is something like the story of "the painted Britons" and their war-chariots, an incredibility which only scholars could believe and pedants could reiterate. When shall we again have history written by statesmen and soldiers, men who know *things*, and are not to be deceived by mere *words*?

Let us endeavour to understand the ethnic position of the Teuton. He is the muscular and material man of Europe, holding the same relation to it which the Tartar does to Asia. He is pre-eminently the *strong* man of the world, the Teuton, Toiton, *Titan* of the West. He does battle even with the Olympian Gods, and as we have seen, sometimes overwhelms them with mountains of human force. He is nature's resource, when her nervous races, Celtic and Classic, have become effete, that is wiredrawn and overbred, "used up". Then she resorts to him for a fresh supply of strength and stature, bone and muscle. A rather terrible process for the wiredrawn, but very necessary for the world, whose mightier works cannot be accomplished by "Aztec" types, even of the most aristocratic descent.

But the Teuton is not all bone and muscle. He has also a goodly brain, well arched, and of the largest volume. He far transcends the Classic man, both in elevation of principle and in warmth of affection. He regenerated the South morally as well as physically. He is by organisation a Pantheist. He is a child of nature, and cannot help confounding her with God. The sublime monotheism of the Semites is beyond him. He cannot discriminate between creation and the Creator. These are his limitations. He is analytical not synthetical in his mental constitution. Hence he can pull down but he cannot build up. He is the world's master in ages of negation. He can reform, but he cannot found. He is not an architect. He conquered political Rome as a soldier. He is in the process of subduing ecclesiastical Rome as a theologian. But when the rubbish has been removed, he will not be called upon to build the new temple. That is a feat reserved for men of a finer race, for the thoroughly baptised Celt of Western Europe, now in the brilliant dawn of his re-emergence, and about to enter on the magnificent epicycle of his prehistoric civilisation.

And here we are landed in another problem. Is the Celtic or the Classic race inherently and essentially the highest? Of course, the scholar will have no hesitancy in deciding for the latter. All history is in their favour. But here arises the yet deeper question, "what is history," to what extent can we trust it in the solution of a mundane problem? To help us in this difficulty, let us see what is the area of time and space which it covers. It goes back some three thousand

years with moderate distinctness, and then surrenders us to the rather uncertain guidance of archæology and tradition. It embraces the Mediterranean seaboard of Europe, Africa, and Asia, and the oceanic seaboard of the latter, to China and Japan. This is its domain. It can tell us absolutely nothing of Celt, or Teuton, or Slavon, till comparatively modern times, say, during the last two thousand years. It knows nothing of the Arab but as a Saracen, or of the Moor, till he emerged as a Carthaginian. It ignores India till the period of the Aryan immigration, and even then surrenders it largely to tradition, till the age of the Macedonian conquests. It takes the antiquity of China upon trust, and simply presumes that the Tartar and the Mongol have always been nomads upon the eastern steppes. Now to what does all this amount? Simply a rather confused and fragmentary narrative of one mundane tidewave of empire and civilisation, its western sweep from India to Britain; not beginning indeed with the former, and not yet able to end with the latter. It tells us only of the occidental march of conquest and colonisation, and the analytical tendencies of thought and belief which accompanied it. It shows us how Babylon reappeared in Rome, and how Rome is undergoing a resurrection in London. It tells us that the theosophy of the East has become the philosophy of the West; and that the magnificently inflectional and sonorous languages of the earlier Aryan tribes, beginning with Sanscrit and ending with Latin, have been disintegrated into those infantile particles, which constitute the baby tongues of Southern Asia and Western Europe. It is simply, then, the narrative of one grand oscillation of humanity, one stupendous swing of the pendulum of fate.

But we want something more than this. We want some account of the previous oscillation. We want to know something about the rise of cromlech culture in Gaul and Britain, and of cyclopean civilisation in Greece and Italy. And we want to know what took the Aryan tribes to Persia, and carried them as resistless victors, through the passes of the Himalayan mountains into the plains of India. This is surely not an unreasonable demand. We have seen the great inflectional languages broken down, so we want to know something of the processes by which they were built up. Philology may reveal this to us, but history cannot.

But to return to the more especial subject matter of the present article, what were the ethnic results of the great Teutonic invasion? And we reply, they were purely baptismal; that is, they produced no permanent displacement of races. Spain is still Iberian. Italy is predominantly Classic; while modern France, like ancient Gaul, is almost purely Celtic. All this will doubtless be readily admitted, but

not so the corollary from these instances, or rather from the law of non-displacement to which they point, namely, that Britain is therefore still essentially Celtic. Saxon prejudice and Norman pride alike revolt at such an insinuation. But again we say, what if it be the truth. If Greek and Persian be still in existence, despite the Turkoman, why should not the Celt remain, notwithstanding his baptismal regeneration?

And here it may be asked, what is the ethnic stage at which Europe has now arrived, more especially in reference to that Teutono-Roman movement, with some features of which Mr. Kingsley's work renders us so delightfully familiar. And we reply, the stage of re-emergence from the Gothic conquests. The old nationalities are reappearing. The specialities of the past are undergoing a resurrection, let us hope in glorified bodies. The Lombard has been absorbed in the Italian, the Visigoth in the Spaniard, the Frank in the Gaul, and shall we add, Angle and Saxon, Dane and Norman, in the BRITON. Yes; perhaps that will do. The *name* is not quite so objectionable!

We have said that the Gothic conquest of the Roman Empire was not an isolated phenomenon, but part of a mundane movement, consisting in the aggressive action of the muscular on the nervous races, during the ethnic collapse of the latter. So neither is the re-emergence local or national. It is not confined to one people, or even to one continent. It extends through Europe into Asia. It is seen in the reappearance of "the Latin nations" on the foreground of history, constituting a part of that process of resurrection, which is obviously going on around the whole Mediterranean seaboard. It has raised not only the Italian, but even the Greek, to an initiative nationality. The Persian is reviving; while, perhaps, even the Indian mutiny was but the first spasm of returning vitality in the farther East. It is not merely the Teuton that is reabsorbed into the Celt and the Roman, but also the Tartar, that is disappearing in the Syrian, the Persian, and the Hindoo. And in conjunction with this, it is interesting to observe that the Slavon and the Mongol, the preeminently representative material types of the two continents, are losing place and prestige in the estimation of mankind. Russia has received her first severe check at Sebastopol, and it will be observed at the hands of the two *western* powers. China is falling to pieces by its own weight and from irremediable corruption, while amidst its pitiable confusion, the same two powers managed to march in triumph to its capital, and dictate terms of peace amidst the smoking ruins of the summer palace of its celestial emperor. The sun is rising in the WEST. The mystic utterance of the Prophet of Islam is undergoing fulfilment. The nervous races of the occident are dominating the material types of the

orient, and another great cycle of destiny is in the process of inauguration.

It need scarcely be said that it is not such views as the foregoing, that the reader will find illustrated in the work of Professor Kingsley. They would perhaps scarcely be suitable either to a reverend author or to an university professor. History, properly so called, can scarcely be written, and it certainly dare not be taught *ex cathedra*. The extent to which its true roots transcend even the faintest echoes of tradition, antedating, not only the most ancient empires, but the oldest monuments, is only beginning to be grudgingly admitted by orthodox scholars, accustomed to limit their views by classical data and Hebrew authority. The range of time imperatively demanded for the sweep of the great cycles, not only for the rise and fall of empires, but for the growth and decay of languages, and above all the succession and interaction of races, is such as only a scientifically trained mind can adequately or even approximately conceive. While the degree in which each movement is truly mundane in its causes and consequences, ever but the part of a larger whole, a link in that mystic chain, descending in unbroken concatenation out of the past and stretching on in prophetic anticipation to the future, is only dawning in its full significance, even on the most advanced thinkers. In saying this, do not let it be supposed that we, even by implication, blame Professor Kingsley because his work is essentially fragmentary, because it takes up Rome at her decline and lays down modern Europe at her dawn. This was in accordance with his plan, and he was, therefore, quite right to thus pursue it. But there is no reason why we should be equally limited in the treatment of a topic so eminently suggestive of broader and more expansive views, of a wider, and we may add, sublimer and more hopeful outlook.

There is one great historical fact more immediately connected with the subject matter of Mr. Kingsley's work, on which both professionally as a clergyman, and by special position as an authorised teacher in an orthodox university, he was particularly limited; we allude to the introduction and diffusion of Christianity. We have already said this was a part of the invasion; it was the moral or spiritual, as the Gothic conquest was the material and martial phase of that great inundation by which Classic civilisation was overwhelmed in the hour of its utter effeteness. Being then part of a movement which in its social and political aspect was certainly mundane, have we not reason to believe that this, its religious province, was mundane also, and as the Gothic immigration of Europe, had its correlated Mongolic invasions in Asia, have we not reason to believe that the rise and diffusion of Christianity in the west must have had its preceding or accompanying parallel in the east? It had, and that parallel was Buddhism, the Christianity of

the farther Orient, as Christianity, contemplated philosophically, is but the Buddhism of the hither Occident. This subject demands profounder treatment than it has yet received. Perhaps we have not even yet sufficient data for an effectual solution of the problem. But we can have no doubt that there is a very near relationship between these two great religions, with their incarnational advents, their similar sacerdotal organisation, and their equally remarkable monastic institutions. To deny that the Pope is the Grand Lama of the West, or to assert that the Grand Lama is not the Pope of the East, is simply to affirm that the sun does not shine at midday. The thing is palpable to all whose eyes are not blinded by prejudice, and what we really want is not its denial but its explanation.

The relationship between Buddhism and Christianity is in truth one of those great and searching questions, for whose honest and thorough discussion the world is but imperfectly prepared. And yet, however long the investigation of this inconvenient subject may be postponed, it is obviously looming in the distance, as one of the grand inevitabilities of the future. Both were reactions against the stringent tyranny of a previous system of law and order as administered by an hereditary priesthood. Each endeavoured to escape from this despotism of a sacerdotal caste, by placing the offices of religion in the hands of celibate monks, taken of necessity from the laity. Both were essentially democratic, and in a measure communistic movements, in opposition to the eminently hierarchical and aristocratic constitution of things which had preceded them. Both are based upon the fundamentally pantheistic idea of the descent of the Divine into the human, the pervasion of the sensible by the spiritual, the suffusion of the terrestrial by the celestial, of which a messianic incarnational advent is the culmination.

But this is not all. To the Anthropologist it is equally interesting to observe that the rise and diffusion of Buddhism under Gautama, preceded and accompanied the great aggressive movement of the Mongolic tribes of the North-east on the more refined and civilised races of the South-west of Asia, just as correspondently, the rise and diffusion of Christianity preceded and accompanied the equally aggressive action of the muscular Teutonic races of the North-east on the more refined and civilised nations of the South-west of Europe. It is here quite obvious that a negative and disintegrative faith, arose in each case as the befitting accompaniment, and we may say exponent of a racial movement, which amidst unutterable disorder, eventuated in placing bone and muscle in temporary preponderance over nerve and thought. Nor does the parallel end here. For as the earlier triumphs of Buddhism were followed after a time by the partial reaction of Brahminism, so were the earlier triumphs of Christianity followed by

the reaction of Mohammedanism, whereby the cradle-ground of India in the one case, and Syria in the other, were recovered for the more ancient faiths. It is scarcely necessary to observe that, contemplated from this altitude, the creed of Islam must be regarded as a return to the severities of Judaic monotheism, from the incarnational heresies of Christianity, Mohammedanism being simply Judaism stripped of its sacrificial ceremonial, and so adapted to the requirements of the world in these latter and post-classic ages.

Now it is obvious that we are dealing here with an immense problem, whose elements cover an area both of time and space but little suspected. The incarnational idea antedates tradition. Brahminism, Buddhism, and Christianity are but its successive embodiments. It pervades not only Classic but Scandinavian mythology. Only, however, in the faintest manner does Mr. Kingsley here and there allude to the very important fact, that some form of Buddhism had obviously preceded Christianity over a large part, if not the whole, of Western Europe. He finds the square bells of Lamaistic Tartary in the West of Ireland, and he discovers that Christ was occasionally accepted as the chief of the Sons of God—in truth, as the last and grandest of the incarnations. But he, perhaps, very properly does not say anything about the worship of Odin, being simply the prehistoric European phase of that great incarnational faith, of which existing Buddhism and Christianity are, as we have observed, the more recent developments. And yet in speaking of the conversion of the Teutonic tribes, such a topic, however inconvenient, is almost unavoidable. Nay without an underlying Buddhistic element, even in the Classic race, it is almost impossible to explain the slow, steady and resistless growth of the new eastern faith, amidst the decaying populations of the old empire. Here again we are reminded of the limitations of what we are pleased to call history. What do we really know of the religious revolutions of the world. Faintly echoed from the far remoteness of an undefined past, we catch the dying glories of the Saturnian age in Europe. But obviously parallel with this was a corresponding movement in Western Asia, eventuating in the dethronement of Moloch. What is the connection between Jove and Jehovah, and what was the essential character of that revolution in religious thought, which brought in their milder worship upon the ruins of that of their sterner predecessor, the cruel old time-god, with his bloody rites and human sacrifices? And why was Saturn spoken of with such reverence in Europe, while the memory of Moloch was held in such detestation in Asia? Truly in all this it is greatly to be feared that we have not yet light enough to see our own darkness. We do not yet know how very superficial is our knowledge, how short is our plumb-line compared with the depth of the sea of time we are attempting to fathom.

Falling back (in utter despair of obtaining anything really satisfactory on this subject from written records) on racial type and organic proclivity, we conclude that, in the first place, the Caucasian race must have originated their own thoughtforms in faith, as in philosophy and government. And secondly, that there has always been and ever will be some well-marked specialities attaching to the creeds respectively, of the Semitic and Aryan divisions of this higher type of humanity. At the present hour this is seen as distinctly in Trinitarian Christianity and Unitarian Mohammedanism, as formerly in the polytheistic arrangements of Olympus, and in the Monotheistic creed of Mount Zion. And we may conclude that in this, as in all other known manifestations of force, there is not only action from the east, but also reaction from the west. In other words, that Asia is not the sole fountain of faith, but that Europe must also, at certain periods, take her share in the great work of religious development. It is, indeed, a serious question, to what extent existent Christianity is virtually an European faith. Judging by the facts of history, it would certainly appear to be most distasteful to the Semites both of Asia and Africa, who have practically extruded it from their borders and put the Monotheistic faith of Islam in its place. But the grander mission of Europe in the religious sphere is doubtless yet to come. She has simply *modified* Christianity, rendering it artistic for the Latin nations, and rationalistic for the Teutons. But in the great day of her re-emergence which is now dawning, in that social resurrection of her South-western types after their Teutonic baptism, which is the dominant ethnic characteristic of our times, will she rest satisfied with this. Is it in short to be supposed that the powerfully organised Aryans of Western Europe, will submit to be held in permanent pupillage, to the ancient thoughtforms of Oriental tribes, long since ethnically effete. We think not. At present Europe is evolving the literature and science of the world. Hereafter she will develop her religion.

From what we have said of Mr. Kingsley's work, it must be obvious that we do not regard it as being exactly of an historical character. He does not so regard it himself. But it consists, nevertheless, of some beautifully written prelections on a most interesting and important phase of European history, and may be studied with advantage, not merely by the general reader, but also by the scientific Anthropologist, seriously desirous of knowing something of the details of that process of racial amalgamation, whereby Teuton and Roman became one people, emerging into the modern Italian, out of the strife and confusion necessarily attendant on the "decline and fall of the Roman Empire."

THE SECRET OF HEGEL.*

Μάντιν ἢ ἰητῆρα κακῶν:—

οὗτοι γὰρ κλητοὶ γε βροτῶν ἐπ' ἀπείρονα γαῖαν.

WE cannot congratulate Mr. Stirling upon the motto which he has chosen for his work: "A prophet, or a healer of ills . . . for such men are welcome throughout the boundless earth." Is Hegel well received in all quarters of the globe? Certainly not, says Mr. Stirling himself, for no one except Mr. Stirling appears to understand him. Is Hegel a healer of ills? It appears to us, on the contrary, that Hegel would be the worst possible physician who could minister to a mind diseased. After him, as after Prometheus, *nova februm terris incubuit cohors*, and especially brain fever in all its forms. And the penalty which has followed upon the fulfilment of his destiny by Hegel has been greater in proportion to the benefit than that which followed upon the fulfilment of the destiny of Prometheus. Endless blessings followed for all mankind when Prometheus drew down fire from the skies; but who, except Mr. Stirling, can tell us what benefit was conferred upon us when Hegel raised a fog from the earth? A prophet too—a seer! says Mr. Stirling. Well, perhaps this epithet is the least inappropriate. The prophet makes obscurity a part of his trade, and his followers may interpret him in any way they please. There are commonly as many different interpretations of the meaning of a prophet as there are different interpreters; and Hegel is no exception to the rule. Mr. Stirling is the last, and therefore, for the time being perhaps, the most infallible interpreter of Hegel; but oh, for an interpreter of Mr. Stirling!

It may possibly be said that this is a very flippant and unbecoming manner of treating a conscientious attempt to expound so great a thinker as Hegel. But we do not believe that such an objection will be raised by any Englishman who has made a conscientious attempt to understand Hegel and to compare his doctrines with those of an opposite school. It does not become us to be cowed by a name; it does not become us to accept obscurity as identical with clearness and depth of thought. If Hegel has indeed a meaning, let us try to drag it out from the chaotic diction in which it is buried; but if we tear away mountain after mountain of verbiage and find nothing when all is done, let us not be afraid to proclaim the fact.

* *The Secret of Hegel: being the Hegelian System in Origin, Principle, Form, and Matter.* By James Hutchinson Stirling. London: Longmans. 1865,

It has often been said that it is as unjust to find fault with the jargon of the German philosophers as it would be to find fault with the technical language or symbols of the mathematicians. But the two cases are no more parallel than are the two halves of one straight line. The mathematicians always tell us what they mean by their terms and their symbols, while Mr. Stirling considers it a merit in Hegel that he leaves us to find out the meaning of all his terms for ourselves.

"Here it is," says Mr. Stirling, "that we have one of the most peculiar and admirable of the excellences of Hegel; his words are such and so that they *must* be understood as he understands them, and difference there can be none. In Hegel thing and word arise together, and must be comprehended together. A true definition, as we know, is that which predicates both the *proximum genus* and the *differentia*: now the peculiarity of the Hegelian terms is just this—that their very birth is nothing but the reflexion of the *differentia* into the *proximum genus*—that at their very birth, then, they arise in a perfect definition. This is why we find no dictionary and so little explanation of terms in Hegel; for the book itself is that dictionary; and *how* each term comes, *that* is the explanation; each comes forward, indeed, as it is wanted and where it is wanted, and just so, in short, that it is no mere term, but the thought itself."

This lucid passage at once rouses the suspicion that there may possibly be many equivocal terms in Hegel's writings, and that they may lead to some fallacious reasonings. Still, we did not expect to find on the very next page of Mr. Stirling's book the following confession:—

"Another difficulty turns on this word, *Vorstellung*, which we have just used. A *Vorstellung* is a sort of sensuous thought; it is a symbol, a metaphor, as it were; an externalisation of thought; or *Vorstellung*, as a whole, is what we commonly mean by conception, imagination, the association of ideas, etc. . . . Then, the process itself, as a whole, is also nameable *Vorstellung* in general."

Still less did we expect to find such a damaging admission as this:—

"Again these terms [*An sich, an ihm selber, an ihm*] will occur in Hegel, not always in their technical senses, but sometimes with various shades, and very much as they occur in other writers. It must be confessed, indeed, that it is these little phrases which constitute the torment of every one who attempts to translate Hegel."

To put the matter more clearly—Mr. Stirling having, in his first volume, lauded Hegel to the skies for the exquisite clearness of his terms, is compelled in the second volume to complain of their ambiguity.

And here we believe is the true secret of Hegel. Mr. Stirling never distinctly tells what the "secret" is; he bids us read Hegel

again and again, and so find out for ourselves. But in our opinion the secret is simply this. Hegel never distinctly realised to himself the meaning of his jargon, and so fell into a series of fallacies through the use of equivocal terms. It was perhaps a misfortune for Hegel that he was born in Germany. Though the German language is probably a reflex of the German mind, it is not impossible that the habit of speaking French or English from his infancy might have placed the writings of Hegel within the class intelligible, might have made him the founder of a school, or might have altogether deterred him from writing metaphysics. The cumbrous German language affords fatal facilities for fallacies; the numerous different shades of meaning of which most German words are susceptible render the use of equivocal terms inevitable even to the most careful and conscientious writers. But when a German goes out of his way, as Hegel does, to found scientific arguments upon far-fetched verbal resemblances, he nips in the bud any faint expectations that he may have raised of philosophical accuracy.

As an example of verbal illustration or argument we quote the following passage from Mr. Stirling's translation of Hegel on Quality:—

"The *Qualirung* or *Inqualirung* (the Agonising or Inagonising, inward pain-ing, pang-ing, throe-ing),—an expression of Jacob Böhme—of a Philosophy that goes into the *Deep*, but a troubled deep,—signifies the movement of a quality (the *sour*, *bitter*, *fiery*, etc.) in its own self, so far as it in its negative nature (in its *Qual*, its pang) expresses and affirms itself through Other—signifies in general the Unrest of the Quality in itself, by which it produces and maintains itself only in conflict."

Any one to whom Hegel may first introduce himself by this sentence will probably be unable to discover anything in it of which he can feel certain except the play upon the two German words *Qual* and *Qualität*. But we do not believe that Hegel could introduce himself in any more intelligible or appropriate way. We find ourselves here plunged *in medias res*. In this one sentence are the principal features of Hegel's philosophy—not exaggerated or distorted, but rather softened and flattered; those features are not here beaten into one formless mass as they sometimes appear after a terrible conflict with the Indeterminate, but rather as the features of a pugilist who has fairly recovered from one defeat and is prepared for another.

Mr. Stirling assures us that the right way to enter upon the study of Hegel is to read that portion of the "Complete Logic" which treats of "Quality" until it becomes intelligible. We, therefore, set to work upon this same "Quality," resolved not indeed to understand it, but either to understand it or to know why it could not be understood. And we believe that we are now able to shew why it is unintelligible.

The sentence with which "Quality" begins is this:—"Being is the

indefinite *immediate*; it is devoid of definiteness as in reference to essentia, as also of any which it might possibly have within itself. This reflexion-less Being is Being as it is only in its own self." Let no one be deterred from reading on because it is difficult to understand what Hegel means by Being, because it is impossible to have any idea of that which has no qualities. Hegel explains further on: "the question of *How* belongs itself to the erroneous ways of Reflexion, which demands comprehensibility, but at the same time presupposes its own fixed categories, and consequently feels itself armed in advance against the reply to its own question." We were at first inclined to suspect that Mr. Stirling had made some mistake in the translation; but, to do him justice, in this and in other cases in which we have referred to the original, we have found him as scrupulously accurate as the case would permit. Hegel does distinctly say that we must not demand comprehensibility (*Begreiflichkeit*) that we are not to ask for any clear conception, any image of the matters about which we are to reason.

Remembering this philosophical dogma, we may pass on to what Hegel says about Nothing: "*Nothing, pure Nothing*; it is simple equality with itself, perfect vacancy, determinationlessness and *intentionlessness* [formlessness and matterlessness]." And then we come to the great Principle of Hegel's system, "*Pure Being and pure Nothing is therefore the same.*" Now we must remark that we cannot see how the conclusion follows from the premises. Pure Being and Pure Nothing, as we understand the statement, are identical because both are without qualities or attributes, or as Hegel says determinateness. Let us throw the argument into the form of a syllogism:—

Pure Being is without attributes;
 Pure Nothing is without attributes;
 Therefore Pure Being and Pure Nothing are identical.

In order to avoid technical terms, let us construct another syllogism on the same principle by way of exposing the fallacy:—

Snow is white,
 White hot coals are white,
 Therefore snow and white hot coals are identical.

But there is another, and perhaps more plausible way of stating the argument:—

When we think of pure Nothing we cease to think;
 When we think of pure Being we cease to think;
 Therefore pure Being and pure Nothing are identical.

As a companion to the above syllogism we suggest the following:—

When we inhale chloroform we cease to think;
 When we get a hard knock on the head we cease to think;
 Therefore chloroform and a hard knock on the head are identical.
 And on the same principle it might be shown not only that these two

are identical with one another, but that they are also identical with Pure Being and Pure Nothing.

But Hegel was not really misled by the fallacy in the latter form ; he was saved from that by another fallacy depending upon language and upon the peculiar character either of the German language or of the German mind. It is a marked peculiarity of Germans to emphasise their words far more than either Englishmen or Frenchmen. Accordingly Hegel is constantly reminding us that we must place the accent here, and not there, there and not elsewhere ; and in many of his sentences he informs us that the accent is to be placed on the copula, not on the predicate. "Nothing," he tells us, "is thought, nothing is represented (conceived), it is spoken of ; it *is* therefore. Nothing has in thought, representation, speech, etc., its Being." In this passage we believe that the meaning and the error of Hegel's fundamental doctrine are apparent. We have once before had occasion to point out the same error when made by a far greater man than Hegel. In that case the error was a mere slip so introduced as not to vitiate the whole work. In this case it is the corner stone of a rotten edifice. It is obvious that, if Nothing exists because it is spoken about, centaurs, ghosts, fairies, men with tails, mermaids, sirens, one-eyed giants, and anything that anyone likes to invent, must exist on the same principle. And this theory is apparent throughout the whole of Hegel's argument. He does not say that the perception of pure Being or of pure Nothing is the negation of perception ; he says that each *is* perception though he prefixes the epithets pure and void. When he draws an illustration from light and darkness—representing Being as pure light, Nothing as pure darkness—he does not say that in each case we should be equally unable to see, but that "the one seeing as much as the other seeing *is* pure seeing—seeing of Nothing." We may, perhaps, travel on "the erroneous ways of Reflexion" so far as to suggest that the destruction of the optic nerves would have the same effect as "pure darkness." The destruction of the optic nerves is therefore the surest road to pure seeing. Whether any Hegelian philosopher will adopt this method of obtaining a view of Pure Nothing which is Pure Being, we cannot predict ; but before he tries the experiment we take the liberty of recommending him to consider seriously whether there may not after all be a difference between seeing and not seeing, and whether the "seeing of Nothing" may not be a synonym for the loss of sight. We do not ourselves pretend to know anything about either pure Being or pure Nothing, but we are too obtuse, too un-Hegelian to see that the imposition of an accent upon the word "*is*" can be sufficient to prove the existence of either, still less the identity of one with the other. And although Pure Being and Pure Nothing are in a sense one to us, inas-

much as we know no more of one than of the other, we have not the vanity to suppose that our ignorance is knowledge transcending the powers of other men. We do not suppose an inhabitant of Jupiter to be an inhabitant of Venus because we know nothing about either, nor can we suppose Being (whatever that may be) to be Nothing (whatever that may be) for a similar cause. In short, we decline (for sufficient reasons, as we believe) to accept the fundamental principle of Hegel.

Philosophers have ere now declined to accept that dogma for reasons different from those given above. "Being," they have said, "and Nothing are the same thing ; it is, *therefore*, the same thing whether I am or am not, whether this house is or is not, whether three hundred dollars are or are not in my possession." To this Hegel answers fairly enough, "Such inference or such application of the proposition alters its sense completely. The proposition contains the pure abstractions of Being and Nothing ; the application, on the other hand, makes of these a determinate Being and determinate Nothing. But, as has been said, the question here is not of determinate Being." A philosopher has, of course, a perfect right to draw such a distinction as this, and to complain if his adversaries ignore it. But, on the other hand, his adversaries, if unable to admit the argument about pure Being, have a right to use their own weapons when the war is carried into their own domain—that of the Determinate. By all means let Hegel be monarch of all he surveys while he remains in the region of pure Being, and pure Nothing ; those revolutions have little interest for us in which, according to him, Being and Nothing alternately come uppermost, and yet remain identical ; we cannot say that Hegel's revelation is not true ; we can only say that Hegel has not shewn it to be true, and that it matters not to us whether it be true or false. But we watch with a jealous eye for the introduction of manners and customs from this unknown, this hypothetical realm into the better known and free land of the Determinate—of the Concrete.

Hegel's disclaimer is a disclaimer only for the time being. In the domain of pure Being and pure Nothing diplomacy seems to be not unknown. When hard pressed, Hegel declares that the identity of Being and Nothing applies only to pure and indeterminate Being and Nothing ; when the danger is passed, both Hegel and his disciple, Mr. Stirling, deliberately make the same assertion about the Determinate. "Hegel," Mr. Stirling tells us, "came to see that there exists no concrete which consists not of two antagonistic characters, where, at the same time, strangely, somehow, the one is not only through the other, but actually is this other." A truly startling statement ! We might possibly reconcile ourselves to the theory that this side of Nowhere is the same as the other side of Nowhere, because the geographical

position of Nowhere has not been accurately ascertained, and because we have no particular interest in the district. But when we are told that the north side of Fleet-street is the south side, and that each is itself and the other at the same time, the matter becomes more serious. A confident and impatient man might, perhaps, fling the book away at once with a laugh. A more diffident man might, perhaps, walk into Fleet-street and ask impartial passengers for their topographical opinions. And an inquisitive man having thus satisfied himself that his wits had gone no further astray than those of the average Englishman, might set himself to inquire how any man could have arrived at the Hegelian point of view.

And here again we must remark that we do not think Mr. Stirling has misrepresented Hegel. Hegel does state that every concrete is its other, and attempts to establish that position by the most curious argument we ever met with. In order to shew that there can be no mistake about the application of this argument, we quote first the following distinct statement of Hegel's :—

"There-Being* is definite, determinate Being ; its determinateness, definiteness, is beënt determinateness, beënt definiteness, Quality—Through its quality is it that Something is,—and as in opposition to Another."

"There-Being" then is this "determinate" Being to which we were told in the passage before quoted the identity with Nothing would not apply. Though Being is the same as its Other, Nothing, and *vice versa*, the principle, we were told, was not to be applied to "There-being" (Daseyn). What then was our astonishment when we read the Chapter on "There-being" and found the following :—

"1. Something and Other are both in the first place, There-beënt or Something. 2. Each is equally an Other. It is indifferent which is first named Something ; and just because it is *first* named is it Something. . . .

"At the same time, as has been remarked, even for conception (representation) every There-being is distinguishable as an other There-being, and there remains not any one There-being that were distinguishable only as a There-being, that were not without or on the outside of a There-being, and, therefore, that were not itself an Other. Both are equally determined as Something and as Other, consequently *as the same thing*, and there is so far no distinction of them." The italics, be it remarked, are not ours.

If we take "Both" to mean any one "There-being" and any one "Other", as we suppose we must take them, the argument is this :—

A (any one "There-being") is Something and Other ;

B (any one "Other") is Something and Other ;

Therefore *A* is the same as *B*.

* "There-Being" is Mr. Stirling's translation of *Daseyn*.

It is hardly necessary to point out that there is a double fallacy in this reasoning. In the first place, if the terms were unequivocal, a precisely similar syllogism would suffice to shew as before that snow is the same as white hot coals. In the second place the term "Other" is monstrously equivocal. *A* may be the north side of Fleet-street and so an Other as opposed to the south, while *B* may be the Sun as opposed to, or the Other of, the rest of the universe. It will then follow from the argument that the north side of Fleet-street and the Sun are one and the same thing.

But let us try to be more charitable to Hegel, and concede that, although he has not taken pains to be verbally accurate, he, of course, did not intend the word Other to be equivocal; that if he intended to speak of *A* as an Other, he also intended to limit the signification of the term Other strictly to *A* and its correlate, which we may call *B*. *A* is the other of *B*, *B* the other of *A*. Be it so; then if *A* and *B* are the same thing, the north and the south sides of Fleet-street are identical.

But, it will be said, Hegel could never have gone so far wrong as this; there must be some other possible interpretation of his meaning. And there is another possible interpretation. Hegel may have meant to say that "Something and Other" is a complete definition of the term "There-being", and also a complete definition of the term "Other", and that the two terms are therefore synonymous. But what a lame and impotent conclusion is this; when we look for an inference we find only a definition just as when we looked for definitions we were sent empty away. We nevertheless believe that Hegel had some such meaning as this, with a most unwarrantable *arrière pensée* attached to it. He wished us to believe that what is true of a word is true of that which is signified by the word—or, to use more forcible if more technical language, that all things which may be denoted by any connotative term are identical. There is nothing, he seems to imply, to which you can apply the predicate "There-being" to which you cannot also apply the predicate "Other"; and, conversely, there is nothing to which you can apply the predicate "Other" to which you cannot also apply the predicate "There-being"; therefore, anything which has the predicate There-being applied to it is identical with anything which has the predicate Other applied to it. Let us, as before, illustrate the absurdity by a similar argument. Let "mortal" and "certain to die" be synonymous terms; then those things of which "mortal" may be predicated are the same as those of which "certain to die" may be predicated; "mortal" may be predicated of men, and "certain to die" of horses; therefore men are identical with horses.

And Hegel apparently did mean to state something more than that

the two terms "there being" and "other" are synonymous. The passage immediately following that which we last quoted, affords evidence that Hegel supposed himself to be dealing with something more than mere words:—

"*This self-sameness* of the determinations, however, falls only into outer Reflexion, into the *comparing* of both; but as the *Other* is at present constituted it is *per se* the *Other*, in reference, indeed, to the *Something*, but it is *per se* the *Other* also *outside of*, apart from the *Something*. Thirdly, therefore, the *Other* may be taken as isolated in reference to its own self; *abstractly* as the *Other*; the τὸ ἕτερον of Plato, who supposes it to be the *One* as one of the moments of *Totality*, and in this manner ascribes to the *Other* a special nature. But thus the *Other*, taken as such, is not the *Other* of *Something*, but the *Other* in itself, that is, the *Other* of itself."

Let us not pretend that we understand the above passage; we quote it, partly in order that we may not be accused of suppressing the context of the previous passage, and partly because Hegel seems to be giving some account of things, rather than, or in addition to, a definition of terms. It will be seen, upon reference to the first passage quoted in this review, that in Hegel's philosophy there appears to be a mysterious trinity—the Thing, the Word, and the Thought—in which we are unable to divide the substance, though Hegel apparently confounds the persons. We do not deny the existence of such a trinity; but we must remark that if, in the Hegelian philosophy, there is no difference between thinking a man a fool, calling him a fool, and being a fool oneself, we hope no true Englishmen will become converts.

We believe, then, that Hegel has been, and is likely to be, unintelligible, because he is continually led astray by mere words—because he does not take sufficient pains to distinguish between words and the things that are denoted by them. Hegel, we believe, was not, as Mr. Stirling asserts, a master of language, but language was rather the master of Hegel. And his obscurity is to be attributed not simply to his technical terms; perhaps not more to his terms than to his utter ignorance of the arts of diction. In confirmation of this opinion, we quote a passage from the original German, which Mr. Stirling himself admits is "curiously tangled":—

"Das Umschlagen des Nichts durch seine Bestimmtheit (die vorhin als ein Daseyn im Subjecte, oder in sonst was es sey, erschien) in ein Affirmatives, erscheint dem Bewusstseyn, das in der Verstandes-Abstraktion feststeht, als das Paradoxeste; so einfach die Einsicht ist, oder auch wegen ihrer Einfachheit selbst erscheint die Einsicht, dass die Negation der Negation Positives ist, als etwas Triviales, auf welches der stolze Verstand daher nicht zu achten brauche, obgleich die Sache ihre Richtigkeit habe,—und sie hat nicht nur diese Richtigkeit, sondern um der Allgemeinheit solcher Bestimmungen willen ihre unend-

liche Ausdehnung und allgemeine Anwendung, so dasz wohl darauf zu achten wäre."

This sentence, we believe, is truly Hegelian; it is a sentence in which we vainly endeavour to drive the *anacoluthon* to the end, just as in Hegel's train of reasoning we vainly endeavour to drive the *non sequitur* to the end of a paragraph. Whose fault is it, we ask, that the writer of such a sentence as the last quoted is unintelligible—that of the reader or of the writer? Are we to be told that the man who cannot see his way clearly to the end of a sentence, can see his way clearly through a long train of reasoning? Are we to be told that this ungrammatical German is a better guide in philosophy than our British writers, whose style is as clear as their thoughts? And yet this is what Mr. Stirling would have us believe—Mr. Stirling, who can give us no better account of the "Secret of Hegel" than the following:—

"The secret of the universe is thought, the spirit of thought, whose own life is the play of what is, and that which is, is thought in its own freedom, which at the same time also is its own necessity. The absolute is the vibration of a mathematical point, the tinted tremble of a single eye, infinitesimally infinite, punctually one, whose own tremble is its own object, and its own life, and its own self."

We regret that we are unable to explain what kind of absolute is the vibration of a mathematical point, etc.; for it is stated by Mr. Stirling, on behalf of Hegel, that there is more than one kind of absolute:—"Your Absolute and your Infinite may be, and I doubt not are, quite incomprehensible, for they are chimeras of your own pert self-will; whereas I confine myself to the realms of fact and the will of God. So, on such points, one might conceive Hegel to speak." But in what respect the tinted tremble of a single eye, or the vibration of a mathematical point, are more intelligible, we have failed to discover. Nay, our "pert self-will" prompts us to inquire in what realms of fact Mr. Stirling or Hegel discovered the vibration of a mathematical point, which is at the same time the tinted tremble of an infinitesimally infinite single eye. We should also like to know by what process either Hegel or Mr. Stirling ascertained the will of God in matters of philosophy.

But, it may be said, allow that there is any amount of absurdity in Hegel's writings, allow that he knew neither how to write nor how to reason, yet you must allow that he had some fundamental principle about which he attempted to reason and to write. If so, what was that principle? To this question we think we have discovered the answer, but it is very different from the answer given by Mr. Stirling. Hegel, we believe, just failed in grasping firmly the fundamental law

of relativity or discrimination ; and, having failed to grasp it, he tried to escape from it. Hegel and this law seem to us like two ancient wrestlers, whose bodies and limbs have been well oiled before the struggle. Hegel advances, apparently has the law in his grasp for a moment, but the next moment appears powerless and drops to the ground ; he gets up, skulks round the ring until he is forced to close once more, and then his adversary again eludes his grasp and trips him up ; and so on *ad infinitum*. Hegel's two hands, so to speak, are his "Something" and "Other"; but they are sadly clumsy hands to start with, and Hegel has no skill in the use of them ; he gets them into such awkward positions, that he soon forgets which is his right and which his left, and ends by believing that he has only one hand, which is right and left, and neither and both, all at once.

All that is true in Hegel's philosophy is the statement of the law of relativity—the law that whatever is known, is known only in its relation to other objects of knowledge, and in its relation to the knowing subject. But we do not hesitate to say, that the principle is worse stated by Hegel than it could possibly have been stated by any British psychologist. It is so badly stated, that it is impossible to believe it was ever fairly grasped by Hegel—so badly, that it leads Hegel himself to self-stultification. That Hegel never fairly comprehended this law, we believe we should be justified in asserting, if we had no other evidence than the single fact that he starts with dogmas and arguments about the indeterminate, whatever that may be. It is clear that, inasmuch as human reasoning must conform to the laws of human thought, which involve the perception of resemblances and differences, the reasoning about the indeterminate must involve resemblances. But no two things can resemble one another unless they possess similar attributes ; and yet, according to Hegel, "the Indeterminate" has no attributes, and every thing which has attributes is "determinate". It follows, then, that, in order to reason about "the Indeterminate", or that which has no attributes and stands in no relations, we must treat it precisely as if it had certain attributes and stood in certain relations. In order to be Hegelian, we must start with the assertion that what is beyond our understanding is not beyond our understanding. In this one proposition, we believe the whole Hegelian philosophy is summed up ; admit it, and you may admit anything else you please—that every thing is its other, that a man is his wife, that the obverse of a coin is the reverse, that the right hand is the left, that the outside of Bedlam is the inside. And here we should leave Hegel and his followers in general, had we not a word or two more to say about Mr. Stirling in particular.

Mr. Stirling tells us that he has devoted to the study of Hegel "a

greater number of years, and for a greater number of hours in each day of these years, than it is perhaps prudent to avow at present." There is something touching in this confession ; there is something in it which is at once manly and modest, and which prepossesses us in the writer's favour. Would that the general tone of Mr. Stirling's work were similar ! But, unfortunately, there is an arrogant assumption of superior knowledge, an exaltation of German intellect, of which Mr. Stirling is the sole exponent, at the expense of English intellect, of which Buckle is represented as the best type. In all things intellectual, Mr. Stirling tells us, we are surpassed by the Germans. Style is of course included ; and Mr. Stirling, partly perhaps unintentionally, but without doubt partly from a fixed resolve to imitate, has effectually Germanised his style. The following passage is a not unfair specimen both of his matter and of his style :—

"Hegel is more impervious than Kant ; yet still, despite the exasperation, the positive offence, which attends the reading of such exoteric works of his as have been attempted to be conveyed to the public in French or English, we see cropping occasionally to the surface in these, a meaningness of speech, a facility of manipulating, and of reducing into ready proportion, a vast number of interests which to the bulk of readers are as yet only in a state of instinctive chaos, and just on every subject that is approached, a general overmastering grasp of thought to which no other writer exhibits a parallel. In short, we may say that, as regards these great Germans, the general public carries in its heart a strange secret conviction, and that it seems even to its own self to wait on them with a dumb but fixed expectation of infinite and essential result."

Mr. Stirling is very hard upon the Aufklärung, the illumination or enlightenment—a name which he gives to the school of writers which we Englishmen commonly regard as intelligible. Macaulay and Buckle are Mr. Stirling's favourite examples. He objects to Macaulay, but Buckle is his abomination. No wonder ! The man who could write the above passage, need not tell us that he has an aversion to the light ; he need not tell us that he and the Germans are unlike Buckle and Macaulay ; he need not tell us that all Macaulay's and all Buckle's graces of style are thrown away on this ungainly imitator of a German hobbadehoy. And yet we are to unlearn all that we have learnt, in order that we may think and write like Hegel and Mr. Stirling. We are to give up our enlightenment, and with it, apparently, also our refinement. When an opponent has but just dropped down exhausted under the heavy weight of too vast a scheme, we are to spurn his remains, and vituperate him as follows :—

"He had a theory, had Mr. Buckle, or rather, a theory had him—a theory, it is true, small rather, but still a theory that to him loomed

huge as the universe, at the same time that it was the single drop of vitality in his own soul ;” and then in a more grandiloquent if not more intelligible strain, “If Mr. Buckle did penetrate the Germans, he found that there was nothing left him but to burn every vestige of that shallow enlightenment which, supported on such semi-information, on such weak personal vanity, amid such hollow *raisonnement*, and with such contradictory results, he had been tempted, so boyishly ardent, so vain-gloriously pompous, to communicate—to a world in many of its members so ignorant, that it hailed a crude, conceited boy (of formal ability, quick conscientiousness, and the *pang* of illumination,—inherited probably from antecedents somewhere) as a ‘vast genius’, and his work—a bundle of excerpts of mere illumination, from a bundle of books of mere illumination, disposed around a ready-made presupposition of mere illumination—as a ‘magnificent contribution’ fruit of ‘vast learning’, and even ‘philosophy.’”

The first question which presents itself, when we meet with this tirade against enlightenment, is—what can Hegel or Mr. Stirling give us instead? They can give us, it appears, a crystal skeleton which is invisible. We are not anywhere informed in what respects an invisible skeleton is the better for being made of crystal :—

“Hegel, *in effect*, has only cleared relations of ideas into their *system*—that crystal skeleton which, the whole *truth* of the concrete, of sensuous affection, of matters of fact, underlies and supports the same. Of this, so to speak, invisible skeleton causality is but one of the bones.”

We think, indeed, that Mr. Stirling is a worthy disciple of Hegel ; and these two philosophers remind us of two celebrated works of art. There is, or was, a painting called “The Israelites crossing the Red Sea.” It was nothing more than a large red daub. The artist was asked for an explanation. “That’s the Red Sea”, said he. “But where are the Israelites?” “They are on the other side”. “And where is Pharaoh with his host?” “They are at the bottom”. The second work of art to which we refer is a photograph immortalised by Albert Smith. It was shewn to him by a friend. “But there is no picture here,” said Albert Smith. “Oh ! yes ! that’s Strasbourg Cathedral”. “Strasbourg Cathedral?” “Yes ; Strasbourg Cathedral at midnight”. “Nonsense, what do you mean?” “Why, if you went out at midnight and it was pitch-dark, you would not see it, would you?” “No”. “Very well ; that’s just what I did when I was at Strasbourg ; and I photographed the Cathedral in the dark, and there it is”.

Now it appears to us that Hegel has, as it were, painted the Israelites crossing the Red Sea, and that Mr. Stirling has taken a photograph of the picture in the dark. Hegel’s philosophy is a huge daub, in which there are no lights and shades except such as may reach it from the objects by which it is surrounded ; Mr. Stirling’s reproduction is paper and nothing more.

We think we cannot do better than conclude this review with one more very elegant extract from Mr. Stirling's preface; it is not for us to suggest any application of the words:—

"An empty belly, when it is active, is adequate to the production of gripes; and when an empty head is similarly active, what can you expect but gripes to correspond—convulsions namely, contortions of conceit, attitudinising, eccentric gesticulations in a wind of our own raising? It were easy to name names and bring the criticism home; but it will be prudent at present to stop here."

THE SKULLS OF THE INHABITANTS OF THE CAROLINE ISLANDS.*

By one of those accidents which have led some ethnologists to imagine that the islands of the vast Pacific have actually been peopled, and which have been made to do service in the great system of "accidental philosophy", a number of crania of the natives of the Caroline Archipelago came into the hands of those zealous cultivators of science, the Dutch medical officers of Java. As none of the Europeans who have visited this Archipelago had taken the pains to collect the skulls of the inhabitants, and thus nothing was known of their cranial conformation, great interest must be attached to the first description of these curious objects—which description has now been made by a most competent observer, Professor J. Van der Hoeven, of Leyden, the author of similar histories of the skulls of many other races.

In the year 1858 Capt. D. Herderschee, of the Dutch ship *Amsterdam*, sailing from Hong Kong to Melbourne, at a distance of ninety German miles from the Pellen (Pelew?) Islands, met with a canoe containing twelve men and women. They were in great distress, famished and weak, so that they were almost reduced to skeletons, and were covered with vermin. Captain Herderschee took them on board his ship, and conveyed them to Batavia. Neither on shipboard, nor in this city, could their language be understood. With the exception of two, who had suffered the least, they were all sick when landed, and were sent to the Hospital. Three of these died immediately, and the rest soon afterwards; indeed, only one of the twelve appears to have escaped. As the language they spoke could not be comprehended, there was some doubt as to their origin.† It was, nevertheless, concluded by Capt.

* *Beschrijving van Schedels van Inboorlingen der Carolina-Eilanden*, door J. Van der Hoeven. 8vo, pp. 16, 2 pl. Amsterdam: 1865.

† Among the twelve islanders, some gave other names to the same objects, so that it is uncertain whether they were all derived from the same island.

Herderschee, who found them, and by others, that they were from the Island of Wolia, Olee, or Ouléa, which is in the Caroline Archipelago; and that they had wandered on the ocean for about one hundred days. There are many reasons to place confidence in this conclusion. Choris, speaking of "Kadou", the native of this island met with in Kotzebue's Voyage, and who had visited the Pelew Islands, tells us that they are bold navigators, and undertake great sea voyages, and that they sail annually to the Isle of Guaham, one of the Mariana group. Their peculiar kind of tattooing also, and their mode of distending the lobes of the ears by hoops of tortoise-shell passed through holes in them, exactly agree with the accounts given by voyagers of the Caroline Islanders.

By the diligence of Dr. C. Swaving, who has distinguished himself as a collector of crania, nine of the skulls of these islanders have been sent to Holland. Four of them were first of all placed in the hands of the late Professor Willem Vrolik, with a number of articles of dress and of ornaments, and the alphabet (vocabulary?) of their language. These are described in the Catalogue of the Vrolik Museum.* In consequence of the lamented death of Professor Vrolik, these skulls were reclaimed by Dr. Swaving, and presented, with four others, to the Anatomical Museum at Leyden, where a ninth, that of "Soejoer", is also placed.

Professor van der Hoeven's Memoir consists of a careful description of these skulls, together with measurements and numerous observations, both on the crania and other subjects. It is illustrated with a good wood-cut of the skull of "Taralipa", showing its form vertically, and two very neatly executed lithographic plates, giving a front and profile view of the same skull, and profiles of those of "Taraloni", and of that of the woman "Laepat", all half-size; and followed by a table of measurements, according to Professor van der Hoeven's method.

Of the crania entering into this description, seven are those of men, and two those of women.† The male skulls occupy the attention of the author first.

* *Musée Vrolik Catalogue de la Collection d'Anatomie*, etc., par J. L. Dusséan, 8vo., 1865, p. 120.

† By the kindness of the Leyden professor, the fine skull of "Erolimo", No. vi of his table, has passed into the collection of the writer, No. 1260. It is inscribed "Erolimo van het eiland Oolea, Carolinen-eilanden. Obiit 14 Dec. 1853. Swaving." It is the cranium of a man of probably forty years of age. The alveoli of some of the incisors of the right side, the inner tooth of the upper mandible, and both those of the lower, are entirely absorbed, presenting the appearance of those of Kanakas and Australians whose teeth have been punched out in early life, during certain ceremonies. But, in this skull, those of the two last upper molars on the left side are also totally

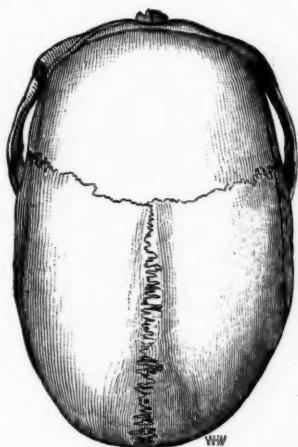


Fig. 1.



Fig. 2.

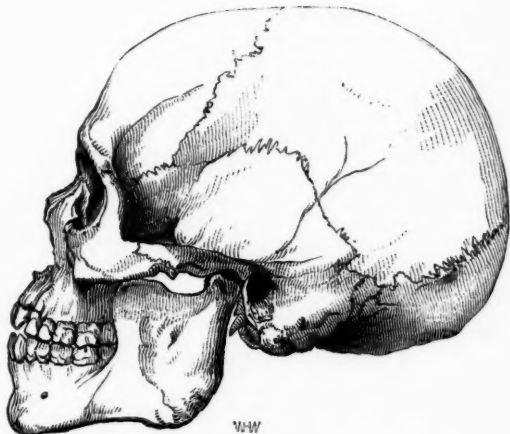
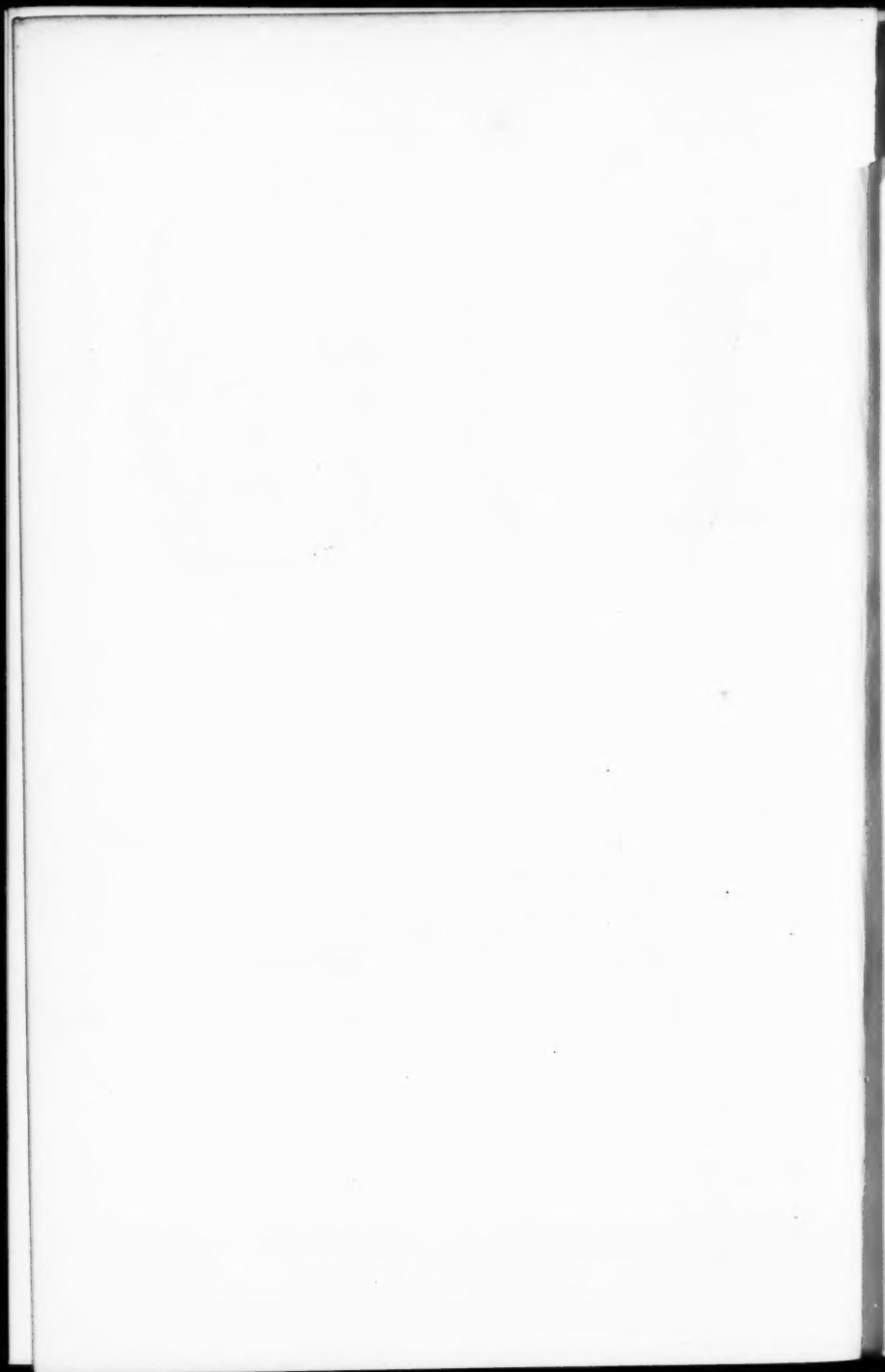


Fig. 3.

Figs. 1, 2, and 3.—Skull of "Biat," Lifu, Loyalty Islands. No. 816. One-third size.



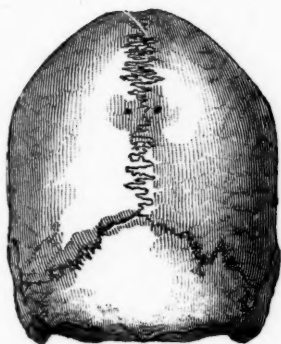


Fig. 1.

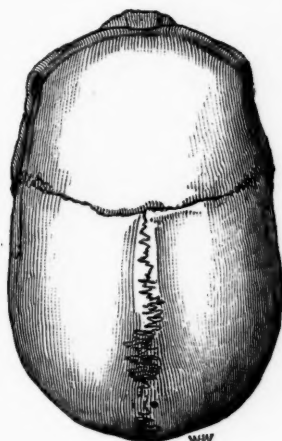


Fig. 2.

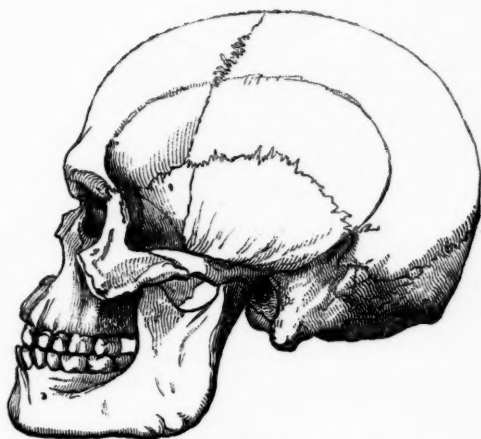
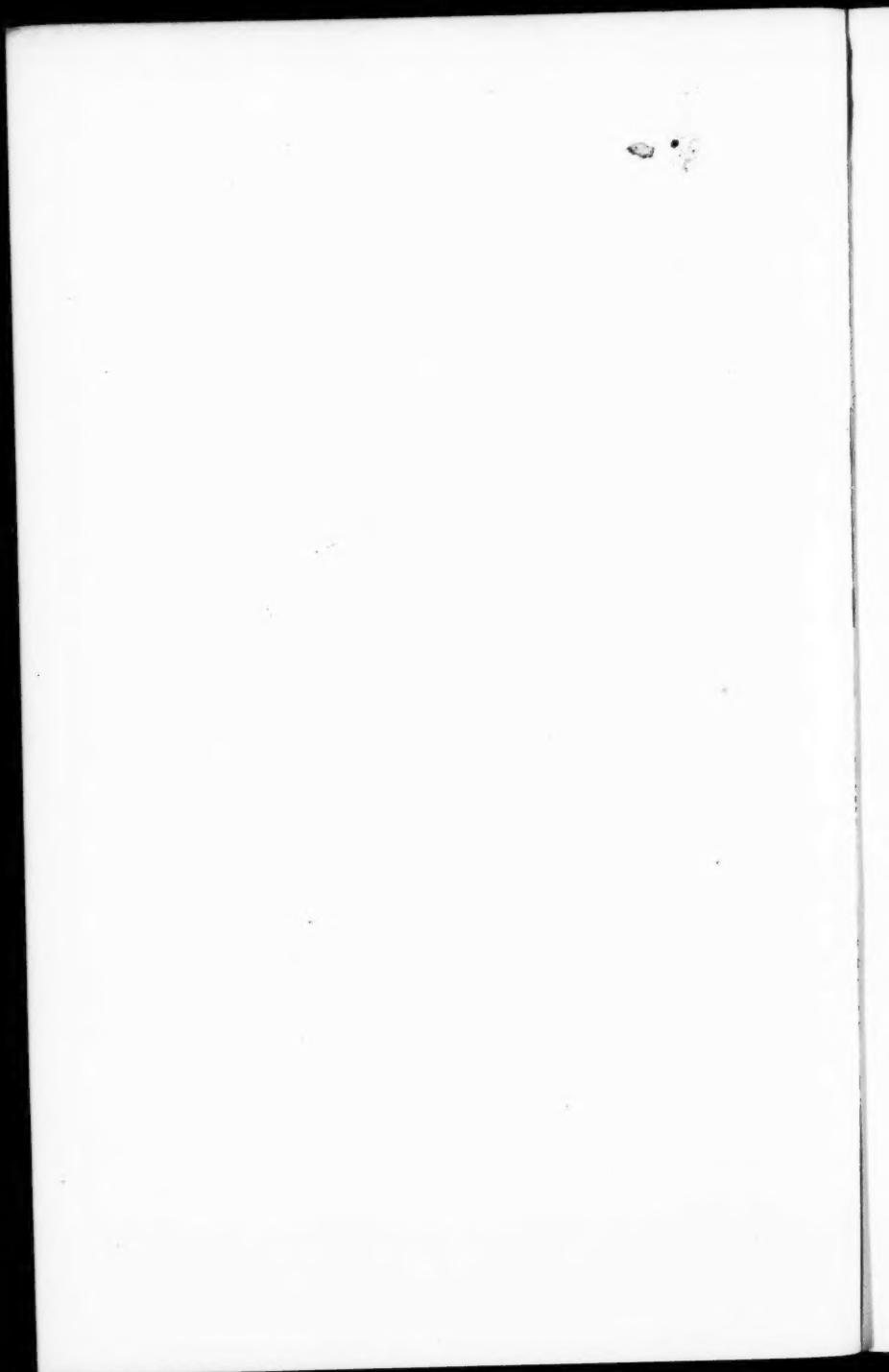


Fig. 3.

Figs. 1, 2, 3.—Skull of "Kilala," Apee, New Hebrides. No. 820. One-third size.



The Professor remarks, *in limine*, that all the skulls agree in having one oblong form; they belong to a people which, in the terminology of Retzius, must be named *dolichocephalic*. This is pre-eminently the case; and, upon such chief distinguishing feature of the whole series, some further remarks will be made in the sequel.

The statement of Dr. Van der Hoeven is, that the mean circumference of the skulls is 515 millimeters, equal to 20.3 inches English. This is greater than the circumference of the skulls of Javans, which is 499 mm.; and, on the contrary, less than that of the skulls of German people, 528 mm., observed by the author. The mean circumference of the Caroline Islanders' skulls agrees with that of the Chinese skulls, which he had previously measured. It may be remarked, that Professor Van der Hoeven, throughout his memoir, compares the skulls described with those of Chinese.

The length of the crania varies from 171 mm. to 191 mm., the mean of the author being 182 mm., or 7.2 inches. In six Chinese skulls the average was 180 mm. The mean breadth between the parietals is 126 mm., or 5 inches. This, it should be observed, is a remarkably small transverse diameter in adult skulls. The author adds, that in six Chinese skulls he found the average breadth to be 137 mm., or more.

The arch of the calvarium, measured from the root of the nasal bones to the anterior edge of the *foramen magnum*, he makes to be, in the mean, 382 mm., or 15.1 inches, which is an unusually long arch. Of this mean measure, the greatest portion is absorbed by the parietals, a lesser by the frontal, about 14 mm. less, and the smallest by the occipital, about 18 mm. less than the frontal.

The height of the skull, in the mean, amounts to 142 or 143 mm., or 5.6 inches. In Chinese skulls the author found this measure to be 145 mm., but some of these were particularly high examples.

From such measurements it appears that the skulls are oblong, narrow and tolerably high.

The author next proceeds to a more minute description of the individual bones of the cranium of the men, into which we do not propose to enter at length. The frontal bone is moderately long, and the point of junction of the coronal and sagittal sutures is, in five of the skulls,

effaced from caries, and it is probable that the alveolus of the canine of this side of the jaw has likewise perished in the same way. The skull is remarkable for the complete ossification of much of the coronal suture, especially its middle portion, and also of the sagittal, which can be traced only at its posterior extremity. This extensive *synostosis* has scarcely interfered with the normal form of the cranium, hence was probably post-congenital. The right *foramen parietale* is still persistent, the left absent.

perpendicularly over the anterior edge of the occipital foramen ; in two skulls, only just before it. In all, the sagittal suture is longer than the frontal bone. Such also is commonly the case in German skulls, although there are examples in which the length of the frontal exceeds that of the parietals ; which, according to Professor Van der Hoeven's earlier observations, he says, appears contrariwise, to be the rule in Slavic and Tschudic skulls. The frontal is proportionally arched, most prominent in the middle,* and gently gliding to the sides, without plainly developed *tubera frontalia*. The *glabella* in most of the skulls stands out strongly. The *tubera parietalia* are placed in a backward position. The outer plate of the pterygoid processes of the sphenoid, is, in most of the skulls, very broad, and directed outwards. This conformation is strongly expressed in the skull of "Erolimo". The nasal bones are not flat, but form with one another a more or less acute angle ; they are narrow, and under the *glabella* appear somewhat less prominent than towards their lower extremities. In their connection with the frontal, they always ascend higher than the adjacent *processus nasales* of the superior maxillæ. The jugal arches do not project prominently outwards.† The teeth are sound, and Professor Van der Hoeven did not observe one affected with caries. This is not inconsistent with the remark made before on the teeth of "Erolimo", which, strictly speaking, do not exhibit indications of caries, although there remain obvious proofs of extensive caries of the alveoli ; still most likely the sequel of caries of the teeth.

Into the particular description of the skulls of the two women it is not proposed to enter here, as they present sexual peculiarities chiefly, if not wholly, and, as the author justly observes, it would be rash to conclude upon the sexual peculiarities of the women of the race from two examples merely. He mentions one anatomical anomaly, which occurs on both sides in one of the women's skulls, and on the right side in one of the seven skulls of men ; an anomaly which Hyrtl, in his *Lehrbuch der Anatomie des Menschen* (Prag, 1846, 8vo., S. 177), says is very rare. It consists in the prolongation of the outer plate of the *processus pterygoideus* of the sphenoid backwards at its base, and its consolidation with the spinous process of the great wing of the sphenoid bone. Above this junction there remains an oblong hole, situated immediately below the *foramen ovale*. The writer has long since observed this peculiarity in other skulls, and cannot consider it very rare.

* This peculiarity will obtain further attention hereafter.

† In the skull of "Soenjoer", the jugal process of the temporal bone is divided by a suture into an anterior and a posterior part. This suture is placed a little before the anterior edge of the articular cavity for the head of the lower maxilla.

The remaining portions of this excellent and instructive memoir are chiefly devoted to the elucidation of geographical points, arising out of the acquisition of these rare skulls. As previously remarked, the commander of the ship, Capt. Herderschee, considered these natives to come from the island of *Wolia*, but the reasons for this opinion are not given. There is no ground for regarding this island as new to geography. It is most likely that named by De Torris *Guliai*, and by others *Oelee*, or *Oellie*,* and would be the same from which "Kadou", who was met with by O. Von Kotzebue, was derived. It is situated in the western part of the great group of the Caroline Islands, in about 7° of N.L., and 144° E.L. The Caroline Islands, as laid down in our maps, extend over a vast space of the Western Pacific, and really consist of numerous distinct archipelagos, the natives and the productions of which probably differ very materially in the different groups. Of these, as well as of the various islands themselves, not a great deal seems to be known with much accuracy. Still, the islands were discovered long since, and often have been visited. Captain Freycinet, who gives an extended and interesting historical account of the communications of different navigators with the Carolines, attributes to the Portuguese, Diego da Rocha, in 1526, the honour of opening the way. The Spaniards had been long established in the Mariana Islands to the north, which are still a dependency of the Spanish government of the Philippines, when, about 1686, Lascano fell in with the Island of Farrollep, and named it Carolina, in honour of Charles II of Spain. Ten years afterwards a canoe containing twenty-nine persons, men and women, from the Islands of Lamoursek, was driven to the Island of Samar, one of the Philippines. This event led to other expeditions of discovery. The description of the adventures of Captain Wilson, of the English ship *Antelope*, which was wrecked, in 1783, on the Islands of Palaos, or the Pelew Islands, affords the fullest and most authentic account of these isles. He remained three months on shore with his companions, built a new vessel, and sailed to China.† An eastern archipelago, the Radak Islands, was visited by Otto von Kotzebue, in 1817; indeed, the principal object of Kotzebue's expedition was to make researches in the Marshal Islands, an archipelago somewhat to the east of the Carolines. Choris was the artist to this expedition, hence his figure of "Kadou", regarded as the most authentic portrait of a Caroline Islander known. In 1819, Freycinet, in the voyage of the "Uranie" and "Physicienne", touched at the Carolines, which led

* "Ile dont le nom s'écrit aussi *Guliai*, *Ulie*, *Olié*, *Uléa*, *Uléé*, et même *Vlee*." Freycinet. *Voyage de l'Uranie*, ii, 81.

† *Account of the Pelew Islands*, by G. Keate. 4to.

him to devote so much space to the history of discovery in these islands, in his great work on the voyage.*

The people inhabiting these numerous isles of the Western Pacific are still very imperfectly known, notwithstanding the visits of many navigators. Professor Van der Hoeven tells us that accounts of them generally agree in the following particulars:—They are of middle stature, not all of the same colour, even in the same island there are differences of tint, the darkest coloured are those of lower stature. Their teeth are white, not filed or dyed black like those of Malays. A defined national physiognomy cannot be detected in their features. They go almost wholly naked, but adorn themselves with dark blue tattooed stripes on their arms and legs, placed lengthwise. Moreover the ears are bored, and the lobes are sometimes inordinately stretched by the objects worn in them for ornaments. In these holes they wear rolls or rings of tortoise-shell or bone, and the women decorations of flowers. We refrain from following the author into an account of the manners, weapons, etc., of the islanders. With these relations respecting the Caroline Islanders, the observations of Dr. Swaving on those whose skulls were sent to Leyden, fully agree, so that there cannot be a doubt of their being really Caroline Islanders. From this gentleman's description we may quote a few statements. Their *hair* was exceedingly *black and smooth*, with the exception of the woman "Laepat", whose hair was rather crisp. Some of the men had whiskers and moustaches. The woman "Natioli" appeared to have had the hair eradicated from the *labia*, which were tattooed, an operation peculiar to her. The eye-lashes were thick, and the nose more pointed than in the Malays of Batavia. The eyes were black, but not large. The colour of the skin, which was covered with a scaly eruption, was a deep brown. One man wore a necklace. With the exception of two men, they all had their skins tattooed, although in different fashions. Save in the case of "Natioli", this ornamentation was limited to the extremities. They had only a cincture round the loins for dress. From this girdle hung down between the thighs a tissue formed of bark.† Prichard gives a lengthened account of the Caroline Islanders, and alludes to the ridiculous nickname bestowed upon them by M. Lesson, of *Pelagian Mongols*.‡ As far as these crania of Caroline Islands are concerned, the epithet Mongolian, when applied to them, would be the most unfortunate and inapposite that could be hit upon in the whole vocabulary of hypothetical ethnography.

Skulls of Caroline Islanders were previously unknown, but figures of

* *Voy. autour du Monde de l'Uranie et la Physicienne*, 1817-1820, par M. Louis de Freycinet. 4to et fol. 1829.

† *Musée Prolik*, p. 118.

‡ *Physical Researches*, v, 179.

the natives themselves appear in many works. The best probably, as already mentioned, is that of "Kadou", in the *Voyage Pittoresque* of Chloris, part v, pl. xvii. In the Atlas Historique of Freycinet's *Voyage de l'Uranie*, there is a fine plate of a Caroline Island woman and man, of the Island of Guam, pl. 53. These are of a brownish tawny colour, and much tattooed on the legs. The figures, as Dr. Van der Hoeven justly remarks, remind one so much of drawings of an European Academy of Fine Arts, that it is difficult to regard them as authentic. The drawings are from the hands of M. Jacques E. V. Arago, the artist of the expedition, who furnished similar figures to his own work, *Promenade autour du Monde*. Plate 54 of the *Voyage* represents two men dancing, and plate 55 a group of fourteen Caroline Islanders engaged in a dance. These and other fine plates of this Atlas are very beautiful, but have such an air of European *beau idéal* as to make one hesitate about their fidelity, which nevertheless may be real. In the last voyage of the *Astrolabe*, under the command of Admiral Dumont D'Urville, Dr. Dumoutier obtained moulds from three Caroline Islanders, belonging to the group of Lougonor or Nougonor. They were taken from young men of twenty to twenty-five years of age. Casts have been obtained from these moulds, and are deposited in the Galerie Anthropologique, at the Jardin des Plantes. The authenticity of these is beyond question, and, being of the size of life, they are both perfectly reliable and of very great value. Fine lithographs of these busts taken from photographs, are given in Dumoutier's Atlas (*Anthropologie. Voy. au Pol Sud*), and M. Émile Blanchard, in the volume entitled *Texte de l'Anthropologie*, comments upon them. In one passage M. Blanchard remarks that the Caroline Islands are so multiplied over so considerable an extent from west to east, and the descriptions of voyagers are so variable, according as they apply to the inhabitants of one isle or another, that we believe the natives of the archipelago are far from all being identical.*

* A sentence of M. Blanchard's work deserves to be quoted at length. He says:—"On sent quel vaste champ de recherches reste aux explorateurs; combien il serait à désirer que ceux qui visiteront les îles de l'Océanie s'attachassent à recueillir un grand nombre d'empreintes du visage de ces insulaires, et de portraits pris au daguerréotype; combien il serait utile aussi que l'on s'attachât à se procurer des crânes et même d'autres parties du squelette en quantité considérable! C'est seulement avec de tels éléments que la science anthropologique pourra progresser. On le voit à chaque pas, rien de contradictoire comme les impressions des voyageurs. Les uns considérant des hommes qui se ressemblent beaucoup en réalité, les déclarent absolument de même race, absolument comme une personne peu exercée en voyant plusieurs espèces voisines d'animaux, et ne sachant pas saisir les différences, n'hésite pas à les trouver toutes pareilles. Les autres, au contraire, mieux doués sous le rapport du tact d'observation, ce qui n'est pas

Before leaving Professor Van der Hoeven's excellent memoir, it should be mentioned that he has examined the vocabulary put down by an English missionary, who was on board the *Amsterdam* with the Caroline Islanders, and which Dr. Swaving sent to the late Professor Vrolik, and compared it with that of Arago in the work above cited. The result is the discovery of such an agreement between the two as to take away all doubt from the mind of Dr. Van der Hoeven, and to assure him that the natives rescued in the canoe were derived from one or more of the Caroline Islands.

It is now proposed to add a short commentary, with a view to attempt to explain and illustrate these rare skulls a little more fully.

I. It must be observed that the whole of the skulls, which the writer has had an opportunity of examining, *agree* in a remarkable manner. They not only agree, but they present such a peculiar conformation as to prevent their being confounded with any other series of crania generally known.

These skulls are distinguished by unusual dolichocephalism, or *great length and narrowness*, to which is conjoined *great height*. Professor Van der Hoeven's measurements afford a length of from 171 mm. to 191 mm., or a mean of 182 mm.; a mean breadth of 126 mm., and a mean height of 143 mm. These dimensions yield the uncommon proportions of breadth to length, regarded as 100, (according to our method of measurements, J), '68, i.e. Broca's *Indice Céphalique*; and height to the same (our K) '78. These ratios in twelve English skulls of men are respectively J '77, K '73; in eleven English skulls of women J '76, K '73; in twelve skulls of Chinese men J '77, K '78; in four skulls of Chinese women J '78, K '79; in the whole sixteen skulls of Chinese men and women J '76, K '78. This is adequate evidence of the remarkable general form of the nine crania of the presumed Caroline Islanders, and of its total diversity from that of English and Chinese skulls. In the description of these skulls, Professor Van der Hoeven has observed, besides their general length and narrowness, the prominent ridge which runs down the middle of the frontal bone, and also the great length of the sagittal suture, and of the parietals. This ridge is continued slightly along the line of the sagittal suture, and being accompanied with an unusual lowness of the parietal tubers, these crania are greatly approximated to those *synostotic* skulls, which have obtained the denomination of *scaphocephali*. In fact, the writer has been inclined to regard them as *natural scaphocephali*, and they

départ à tout le monde, sont frappés par des dissemblances qui avait échappé aux premiers et voient des types différents là où les précédents avaient cru voir des types identiques. De là cette confusion répandue de toutes côtés." —P. 104.

have probably a stronger claim to be considered such than the skulls of Esquimaux, before pointed to by Professor H. Welcker.*

II. Allowing that these crania agree among themselves, whilst they differ in a singular manner from those of other well-known races, and there need be no hesitation in making these statements, it may next be asked, *are there any skulls of less known people which exhibit a similar conformation?* This question may be answered in the affirmative. In the extensive collection of crania formed by the writer, his attention was long since arrested by a series of skulls, all of which are derived from the same region of the Pacific Ocean as these of Caroline Islanders; which series stands out pretty distinctly from the rest of the skulls of human races hitherto known and described. Their peculiar features have already been alluded to. They are unusually long, unusually narrow, and, at the same time, very high, or tall. Taken proportionately, those of the Caroline Islanders do not present the features in so exaggerated a degree as others of the series. The frontal tuberosities are less prominent than usual, and the parietal tubers have a still greater depression. The parietal bones are long, and sometimes elevated at the sagittal suture, so as to approach in form the *carina* of scaphocephalism, which ridge, in some instances, as already noticed, may also be discriminated along the frontal bone. They are distinguished by great fullness and length of the occipital region, and sometimes considerable prominence of the zygomatic arches. Although prognathism occurs among them sometimes to an exaggerated degree; yet, at times, as in the Caroline Islanders, it is absent, or not remarkable.

It may be well to state explicitly, that the above is somewhat an ideal picture, intended to mark the peculiarities of this series of crania in a distinct manner; individual instances nevertheless occurring with all these features, even in an extreme form. In nature it is sometimes found that the skulls of the people to whom this peculiar type appertains, and to which we have applied the distinctive term high-narrow skulls, or *hypsi-stenocephalic*, exhibit it in various degrees; and, in some individual cases, the distinctive features are in a great measure wanting. But this is quite in accordance with the usual diversities of nature.

These hypsi-stenocephalic crania are sometimes seen in an extreme form in the skulls of *Loyalty Islanders*, as in No. 810, No. 811, and especially No. 816, the skull of "Biat", from Lifu, in the writer's collection. The length of this latter is 7·6 inches, or 192 mm., its breadth 5 inches, or 127 mm., and its height 5·8 inches, or 147 mm., which, expressed proportionally, afford $\frac{100}{5} \cdot 65$, $\frac{100}{7} \cdot 76$. They are also seen

* *Untersuchungen über Wachsthum und Bau des Menschlichen Schädels*, 4to, 1862, S. 118.

in *New Hebrideans*, No. 575, from the Island of Erramanga; No. 815, from the Island of Tana; No. 817 and No. 819, from the Island of Fate, or Sandwich Island, all strongly marked examples; and such also is No. 820, from the Island of Apee. And they likewise occur among *New Caledonians*, as in No. 812, from the Isle of Pines; and No. 813, the skull of "Joey", from the Isle of Yengen.* As far as can be judged from two specimens of the skulls of women from the *Feejee Islands*, Nos. 233-4, they also seem to appertain to this hypsistenocephalic group. Dr. Pickering made the remark, "The Feejeean skulls brought home by the expedition will not readily be mistaken for Malayan; they bear rather the negro outline; but they are much compressed, and differ materially from all other skulls that I have seen".† This passage appears fully to confirm our view.

It must remain for future investigators to determine the degree to which this peculiar type prevails in these groups of islands. As far as can be at present ascertained, it is general, yet marked with different shades of intensity in different cases. That it is not universal the instance of No. 1159, a New Caledonian skull, derived from Dead Man's Peak, which is at the entrance of the River Kanala, on the east coast, shows. This cranium does not present the extremely long, narrow, high form; but, as it has been artificially deformed, whether intentionally or not, by an extensive parieto-occipital flattening on the right side, it is of no weight in the argument.‡

* In the first volume of the *Bulletins de la Société d'Anthropologie*, there are some valuable descriptions of the skulls of New Caledonians, by M. de Rochas (see also *La Nouvelle Calédonie et ses Habitants*, par le Dr. Victor de Rochas, 1862) and M. Bougarel, which are illustrated by a series of seven plates, representing the crania in five different aspects. M. Rochas, in his table of measurements, introduces a skull from the Isle of Pines, and another from the New Hebrides, both of which are of the extreme length of 200 mm., or 7.9 inches. M. Bougarel points out clearly the specific forms of the New Caledonian skulls, and shows how these evidently differ from those of Polynesian Islanders.

† *The Races of Man*, 1848, 4to, p. 145. U.S. Exploring Expedition.

‡ The history, descriptions, and measurements of these crania, will be included and given at some length, in a work now in a state of great preparation for the press—*Thesaurus Craniorum*, Catalogue of the Skulls of the various Races of Man, in the Collection of Joseph Barnard Davis, M.D.

It may not be quite out of place here to mention, that some of the crania to which we have referred manifest an extremely savage form, or, more properly, an extreme of that form to which we are disposed to apply the terms savage and ferocious. No. 818, a skull of a young man from Fate or Sandwich Island, is the most prognathous and most pithecoïd cranium in the whole collection. The enormous and wide jaws, forming the segment of a large ellipse, filled with a perfect set of very robust but fine teeth, almost necessarily carry back the thoughts to anthropophagism. The large, very

III. It becomes a question for craniologists to determine whether these skulls, to which the name *hypsi-stenocephalic* has been applied, may not deserve to be ranked as a chief class, somewhat on a level with the three great classes of skulls deduced by Blumenbach from his vertical method, viz., the Caucasian, Mongolian and Ethiopic; or the two great divisions of Retzius, the *dolichocephalic* and *brachycephalic*. The latter terms mark extreme forms, just as black and white in colour; therefore, the proposed class cannot be quite so distinctly defined. Like red and blue in colours, they are in some measure intermediate, but not the less capable of being discriminated. They certainly do differ from all the other great divisions of skulls, although they approach nearest to those of some tribes of African negroes. Camper pointed out the *dolichocephalism* of these latter, and, indeed, he also spoke of the great breadth of the skulls of Asiatics, and the middle position in this respect of those of Europeans. The observation with regard to negroes was supported by Soemmerring,* and confirmed in the great work of Van der Hoeven.† In some respects, no doubt, these crania of Pacific islanders *approach* those of African negroes, but they agree with them in a very partial manner indeed. The great *height* of the *calvarium*, combined with its narrowness, is not seen in African skulls; and, instead of the flat nose, the result of the broad plane form of the nasal bones, and, equally so, of that of the nasal processes of the superior maxillaries, in the Pacific islanders' skulls the nasal bones are narrow and elevated at their juncture into an acute angle, whilst the before-mentioned nasal processes are entirely conformable, and inclined to each other at an equally acute angle.

We do not pretend to define what ought to be the exact value of *hypsi-stenocephalic* skulls in any arrangement of human crania, but have no hesitation in saying that they deserve a distinct place, apart from all others.

IV. Further inquiry will have to be directed to these subjects before it can be determined with any degree of confidence to what different peoples this peculiar cranial conformation belongs. It seems every way probable, that the Archipelagos of the New Hebrides and projecting face, above which an extremely sloping narrow forehead does not stand up, but strongly recedes backwards, give the perfect image of the muzzle of an ape. The *calvarium* of this skull, when seen in profile, very closely resembles, except in the irregularity of outline occasioned by the compressing bandages, that of an ancient Peruvian; such, for example, as that of Morton's, pl. 3, or that of the *Clickatat*, pl. 48 (*Crania Americana*).

* *Ueber die Körperliche Verschiedenheit des Negers vom Europäer*, 1785, S. 19.

† *Bijdragen tot de Natuurlijke Geschiedenis van den Negerstam*, 4to, 1842, bl. 23.

of New Caledonia may be regarded as the focus of hypsi-stenocephalism ; from whence it radiates eastwards to the Loyalty Islands and probably to the Feejees, and westwards and northwards to the Caroline Islands ; with how many intermediate points it is at present, from the very imperfect knowledge we possess of the craniology of the Pacific, which might more properly be called deplorable ignorance, impossible to tell.

There is, however, evidence to show that it is not universally, and, as it were, indiscriminately, distributed throughout the numerous *adjoining* or *approximate* archipelagos of this great region of the Western Pacific. It is most probable that it is limited to particular islands, or groups of islands, within the bounds to which it does extend. The Salomon Islands constitute a large archipelago to the north-west of the New Hebrides and New Caledonia. The writer's collection includes five skulls of Salomon Islanders, and there are others buried in the cellars of the British Museum. These agree in their general forms ; they are not high, they are even particularly low in the frontal region, and have a peculiar angular, bony, savage aspect, with prominent parietal tubers. On reverting to the figures of the busts of Caroline Islanders, and of Salomon Islanders also, in the splendid atlas of Dumontier, it will be seen, not only that the latter agree closely with the account now given of the skulls of Salomon Islanders, but, likewise, that the three busts of Caroline Islanders do not exhibit any material differences from these skulls ; on the contrary, they really belong to the same species. Hence, the inference is, that there are different cranial configurations in the islands of the Caroline archipelago ; that of some islands may be called hypsi-stenocephalic, whilst that of other islands presents a striking conformity with that of Salomon Islanders. At all events, the series of crania described by Prof. Van der Hoeven, and which there seems good grounds for regarding as authentic, differ essentially from the natives of the Lougonor or Nougonor group of the Caroline Islands. And this is fully confirmed by the account of the busts given by M. Blanchard, when he compares them with Polynesians. His words are :—"Ce sont des physiognomies plus intelligentes que celles des Polynésians de l'est, *des têtes plus rondes*, des fronts plus développés," p. 100. The greater roundness of the heads of these natives of Lougonor, or Nougonor, than those of Polynesians is in conformity with the figures of the busts, and also in agreement with our skulls of Salomon Islanders ; but the statement is totally at variance with the crania described by Professor Van der Hoeven. This may be considered to confirm, almost to prove, the essential diversity of the races peopling the different islands comprehended under the name of the Caroline Archipelago.

V. That the Islanders brought by the canoe to Batavia could not belong to any race of people to which the term Papuan can be applied, is undoubted; still, there remain two questions which ought not to be passed over in silence. One is, whether the races of Islanders with hypsi-stenocephalic skulls are any of them Papuans; the other is, whether this term, in its ordinary acceptation, is confined to those species of men, who are distinguished by having the hair not growing equally spread over the scalp, but, in tufts, with bare spots between. There are many distinct races, as distinct as species, which agree in presenting tufted hair. The Hottentots, the Bushmen, and the Oriental Negroes of the Pacific Islands, are as distinct from each other as any known races of man, yet they are all said to agree in having this curious tufted hair. The New Caledonians, the New Hebrideans, and the Feejee Islanders are Papuans, or agree in the practice of teasing out the hair into a kind of mop, some of them, as the natives of Aneiteum and Tana, wearing it in very slender ringlets, each of which is wound round at great pains, with a vegetable fibre, so that the whole is made to resemble a thrum mop, or one form of wig worn by the ancient Egyptians. There is no doubt that the natural structure and growth of the hair in some of these Islanders has suggested this strange fashion, and is especially adapted to the manipulation to which it is subjected. It is generally exceedingly fine and slender, and of that structure which Mr. P. A. Browne denominated *eccentrically elliptical*. The consequence of this form of its section is, that it naturally twists into cork-screw locks. These the natives avail themselves of, and wind round them a thin vegetable fibre, which is the fine rind of a plant, to within an inch of the extremity; by which means the separation of the locks is ensured, and their growth to an indefinite length. Others, also designated mop-headed, by means of long skewers and wooden combs with five or six long teeth, which they wear in their hair, tease out their crisp locks into an immense bush. It is true that no straight-haired people, *Leiotrici*, could follow either of these fashions. Those having any kind of crisp or woolly hair, which grows sufficiently freely, might adopt either custom, irrespective of its springing in tufts. And to judge from what we can learn concerning these Papuans, it appears that races with essentially different kinds of hair, do tease it out in this manner, and have been called Papuans. Neither Pickering nor Williams, Erskine, nor Seemann says that the Feejeeans have hair growing in tufts, yet they are among the most famous people for mop-heads, and for hair-dressing. M. de Rochas says nothing of tufted hair among the New Caledonians, who have the high narrow skulls. Like most other travellers, he is brief on the subject of hair, describing it most at length in his first account of New Caledonian Anthropology

(*Gazette Médicale*, 1860, p. 185), in these few words, "les cheveux noirs, laineux et crépus".* The Papuans of New Guinea are considered to have tufted hair, and the hair of the Negritos of the Philippine Islands has been said to grow in tufts.† Mr. Earle assures us that a slight mixture of the full-blooded Papuan with "the brown race", removes the peculiarity of tufted hair, which he attributes to the Papuans as a race. (*The Native Races of the Indian Archipelago*, p. 3.) Hence it may be concluded that the high-narrow skull is not essentially associated with the mop-headed races, and that it is equally independent

* A considerable number of specimens of the hair of New Caledonians, collected by Lieut. M. E. Didot of Tahiti, are now in the possession of the writer, and they seem to prove that, both in colour, texture, and mode of growth, there is much diversity. In general it may be said to be, in common parlance, black; but it varies from a deep brown or black, between Nos. 41 and 48 of Broca's tableau, and passes through many shades to a yellowish flaxen colour, much the same as No. 45 of Broca; this latter being the hair of a girl of three years of age, distinguished also as "peau jaune." It is mostly fine in texture, generally crisp, sometimes very crisp. Its character is that of short hair, never exhibiting the long flowing locks of Europeans. It is sometimes straight, sometimes a little flexuous, but more frequently bushy and in confused masses. A few specimens present the small, short, crisp, corkscrew tufts; but whether these grow separately or not there is no indication. The hair both of the head and the beard of "Jack", a New Caledonian chief of the Dumbia tribe, is black, Broca's No. 48. In the photograph of this head, which is preserved at Brest, politely transmitted by Dr. A. Le Roy de Méricourt, the hair is seen to be short, curly, and bushy, but not growing in separate tufts. The beautiful calotype portrait of "Williamu", a native of Aneiteum, New Hebrides, presented by the Rev. John Inglis, who brought him to this country, exhibits short, crisp, curly, thick, not discrete hair. Mr. Inglis designated him a Papuan. The specimen of his hair sent by this gentleman to the writer is fine, of brown colour, not very dark (like No. 41 of Broca's table), not very crisp, curly, so interlaced that it would be very difficult to comb out, but easily matted or teased out into a mop-head.

† The small skull of a Negrito from the island of Panay, sent the writer by Mr. Nicholas Loney, is remarkable for still retaining a good portion of its hair. This consists of a number of very short, small, grey curls scattered over the head not very thickly, but, as far as can be ascertained, not growing in tufts, not woolly, nor spirally twisted. A specimen of hair of a Negrito woman, also from Panay, is of a dark brown colour, deeper than No. 41 of Broca's tableau. It is fine, and growing freely, bushy, wavy in texture, and has pretty surely grown equally spread over the head. The fine photograph of a pure Aëta man taken at Manilla, sent by Mr. W. W. Wood of that city, exhibits a short, curly, crisp hair, much resembling the woolly locks of the Negro, but covering the whole head alike. That of a Negrito or Aëta woman is exactly of the same character. Black, woolly, crisp, and frizzled, are epithets applied to the hair of the Negritos by Mallat, Giromiere, and Earle; but I do not see that the two first describe it as being in separate tufts.

of the fact of the hair growing in tufts, or otherwise. Both positions may be said to receive confirmation by the crania of Papuans of New Guinea, and of Alfours in our collection. Neither the former, Nos. 1400, 1401, and 1402; nor the latter, Nos. 1403, 1404, and 1405, exhibit any tendency to the peculiar form here designated hypsi-stenocephalic. Hence, it may be scarcely needful to add, that some Papuan races have the high-narrow skull; and that the name Papuan is not confined solely to races with tufted hair; so that hypsi-stenocephalism has no connection either with Papuanism, or with tufted hair.

VI. In conclusion, it may be remarked that these high-narrow, or hypsi-stenocephalic skulls do not seem usually to be distinguishable for want of capacity. That some of them are even large may be affirmed safely, from the measurements of those named, viz., Nos. 812, 816, 817, from New Caledonia and the New Hebrides, which have an average internal capacity of 80 ounces avoirdupois of sand, equal to 96 cubic inches. These are exceptional in size, but 96 cubic inches is exactly the mean of the English skull, as deduced by Morton in his great table. Such an observation and the results of the measurements of the skulls of the ancient Britons described in the *Crania Britannica*, lead to the idea that some modification may be required to be made in the doctrine that aboriginal races are distinguished from Europeans by having lesser brains. It certainly would be impossible to pack the brain of these New Hebrideans in the skull of an European, because of the great difference of shape. It would not fit the cavity, and must, indeed, be reduced to a state of disorganisation, before it could be made to enter into this cavity, although of equal size. Have we not in this fact a key to the psychological peculiarities which discriminate the two races? Is it not the different conformation of brain, running through all its organisation, that lies at the basis of the great essential diversities of the two peoples; one of which is what is called civilisable, or ceaselessly and almost endlessly progressive; the other savage and stationary—if movable, moved only to destruction?

J. B. D.

THE TEUTO-CELTIC AND SLAVO-SARMATIAN RACES.*

AMONG the European races, two stand out more prominently than others; they are not only the dominant races of Europe—they are the dominant races of the world. The one occupies the east, and the other the west, of this highly gifted continent. They are both mixed races, and both are in contact with races comparatively pure. These are the Teuto-Celtic and Slavo-Sarmatian races. The former occupies France and Britain, Belgium, Switzerland, some portions of North-Western Italy, and South-Western Germany; the latter, the vast territory of European Russia.

From North-Western Germany and Scandinavia, the Teutonic peoples have, at various periods, encroached upon Gaul and Britain, infusing new and important elements into the original Celtic ones; and from Western Russia, Poland, Bohemia, Hungary, and the provinces now constituting European Turkey, the Slavonian race moved eastward and northward, and encroached upon the Sarmatian nations, imparting to them physical and mental qualities of a more elevated character than they originally possessed. Each of these new mixed races became more active and energetic than the primary races of which they were composed; the pure Slavon has been found unable to cope with the Slavo-Sarmatian, and the pure Teuton with the Teuto-Celt. Germany has repeatedly given way to France, and Poland and Livonia have succumbed to Muscovy. Wessex, with its large Celtic intermixture, rolled back the wave of conquest on the rest of the Anglo-Saxon heptarchy; the Teuto-Celts, under Charlemagne, vanquished the pure Saxons of the fatherland; the more mixed Norman-French subdued England and Sicily; and the still more mixed Anglo-Normans reduced Ireland and Wales under their sway, and defeated France with inferior numbers at Cressy and at Agincourt. Mixed races, it appears, when the original races have peculiar excellences, and do not differ too widely from one another, have a decided advantage over pure ones. Before the time of Mohammed, Arabia had received a large infusion of blood from Syria and other countries on her northern frontier, and the Arabs with whom he and his followers achieved so many conquests were a mixed race.

In the east of Europe, the Slavo-Sarmatian has been steadily and surely advancing to superior power and extending his bounds, by the subjugation of neighbouring nations. He has been bringing under

* Kinglake's *History of the Invasion of the Crimea*. 1864.

his sway peoples more barbarous than his own in the east, and peoples more civilised in the west. On the south he has been rapidly curtailing the domains of the Ottoman, and on the north-west appropriating the territory of the doughty Scandinavian. One of the sovereigns of Russia mightily consolidated her power, making her feared and respected in the eyes of Europe ; while he prevented the Swedish hero, Charles XII, from playing the part of a second Alexander. His successors followed surely and prosperously in his steps, and, in conjunction with Teutonic powers, partitioned the Slavonian Poland and destroyed her nationality. From the Sarmatian race the Russian has derived much animal energy—that energy which has so frequently been the cause of terror and alarm to superior and more intellectual races. On this animal energy, the high, intellectual qualities of the Slavonian have been engrafted, endowing the mixed people with activities and talents which are not yet, perhaps, appreciated by the western nations of Europe. Certain it is that the Slavo-Sarmatian has been growing and strengthening at such an amazing rate as almost to seem a mystery to the rest of the world. One characteristic of this people, which seldom belongs to barbarous nations, and not frequently to moderately civilised ones, is that they have been all along fully alive to their own deficiencies and anxious to amend them. To accomplish this end, they have availed themselves, without prejudice, of the service of foreigners ; in employing whom, they have shown, mostly on all occasions, much discretion in their choice. Among foreigners employed, Scotchmen seem to have met with special favour, and these have shown their national talent and forethought in the signal services rendered by them to the Russian empire.

The ambition of becoming the dominant race of the world is a passion which, since the days of Peter the Great, has inspired every Slavo-Sarmatian from the emperor to the peasant ; a passion which forms one bond of union among this people from Archangel to Odessa, and from the Baltic to Behring's Straits. Their religious superstitions embrace a mixture of gross Turanian rites and intellectual Slavonian mysticism. In the west their influence is injurious, as there they come in contact with superior races ; their proper mission is towards Central Asia, where their peculiar mental and physical qualities fit them for advancing civilisation and improvement. For upwards of a century now their subtle diplomacy has been gradually augmenting their authority in Western Europe ; but since the time that Napoleon I invaded their territory and encountered such signal disasters, their ambitious tendencies have been watched with suspicion, and, accordingly, it has been the policy of other European nations to guard against their encroachments. All along, in their

wonderful career, Constantinople has been looked to with eagerness for a Southern capital, where, on the ruins of the Ottoman Sultanate, they have fondly hoped to establish the seat of a new empire of the world rivalling the Greek and Roman, and from which they anticipated to dictate terms to all nations and peoples, and to send their ships through the Mediterranean and the Straits of Gibraltar to lord over the western ocean, and there to form the middle of a naval wall of ships of war, which was to encircle the world from the Baltic through the Atlantic, Indian, and Pacific Oceans to the sea of Kamschatka. To the Czar of Russia at the head of the Slavo-Sarmatian people, France and Britain, constituting the two mighty branches of the Teuto-Celtic race, were to strike sail. Europe was to be ruled from the east; while French and English were to bow to the Russ at Stamboul.

Such, no doubt, were dreams in which thousands of Russians indulged, and a pretence was only required for engaging in war with the Turk in order to strip him for ever of his European dominions; while at no very remote future period it might be convenient to follow him to Asia and add all his possessions there to the Muscovite empire. These ambitious aspirations led to a war which brought out in bold relief the peculiar characteristics of this people, and those of the most active and energetic of all races, the Teuto-Celts of Western Europe.

That there is a national difference between the British and French is sufficiently certain, but this is a difference of degree rather than of kind. Both nations have the principal element, which is Celtic, in common. The romance of the extirpation of the ancient Britons by the Saxons is daily losing its authority as history. The bulk of the English people is Celt crossed with Saxon and other Teutonic invaders, who became the conquerors, not the extirpators, of the natives. For centuries the English looked upon the Saxon invaders of Britain as their principal ancestors, exactly as the French did upon the Franks as theirs. When a people are conquered, the conquerors become their aristocracy, and all are proud of claiming descent from them. The conquered are for a time despised, and, in consequence, are ready, when occasion offers, to claim origin from the conquerors. Franks and Goths seized upon Gaul exactly as Saxons, Angles, Jutes and Frisians seized upon Britain. As the Franks accomplished their conquest more quickly and had one king in common, France became a united nation sooner than England. The founding of the French monarchy by Clovis put an end to any further Teutonic invasions in Gaul, while the conquering Franks adopted the Romanised language of the conquered people. Here then was formed a uniform Teuto-Celtic nation with the Celtic element largely preponderating. The

case was different in Britain. The Saxon invaders were not so powerful or united as the Franks ; and in discipline and military tactics the former seem to have been much inferior to the latter. They had to cross the seas, and this circumstance rendered it more difficult for them to come in large force. Accordingly they arrived in Britain at successive periods under various leaders, and were divided among themselves, on account of which they warred with one another as well as with the natives ; while with the latter they frequently entered into alliances against one another. They acquired footing in the country very slowly, several centuries elapsing before Britain was entirely conquered by them, and Wales remained to be conquered by the Anglo-Normans. In this manner was the Teuto-Celtic race of England formed, more Teutonic blood being introduced in consequence of successive invasions than in France, and from the direction of the invasions it was more unequally distributed, Teutonic blood predominating in the east, and Celtic in the west.

A more uniform diffusion of Teutonic blood was effected in the British Isles by the invasions of the Scandinavians. The Danes seized upon the east of England, and finally conquered the country ; while the Norwegians descended on the west of Scotland and on the north and east of Ireland, wresting the Hebrides and the adjacent coast from the crown of Scotland and founding the kingdom of the Ostmen in Leinster. A fresh supply of Teutonic blood was infused into that of the French by the Norman invasion. In Normandy a new mixed race was produced from Normans and Franco-Gauls, which became one of the most remarkable the world had ever beheld, and which extended itself into England and Italy, conquering the whole of the former country and a large portion of the latter. In this manner were the mixed races of France and Britain formed, and from the facts adduced it may be readily perceived that the two races are identical ; the Frenchman having more of the Celtic element than the Englishman and Scottish Lowlander, but not more than a large portion of Scottish Highlanders, Welsh, and Irish.

The Norman conquest of England helped still further to assimilate Englishmen and Frenchmen to one another in temperament and character ; so that notwithstanding the numerous wars which have taken place between them, and the national antipathies bred by these, the French and English have more similarity to one another, and more latent sympathy with one another, than any other two nations in Europe. Small differences often create greater animosities than large ones ; sects closely allied to one another in opinion fight with more rancour than those that are separated by a wider gulf in belief ; and so it has been with the English and French. "The English and

French", observes Schlegel in his *Philosophy of Life and Language*, "are very much the same at bottom", and in reality they are so. Their different geographical position has thrown the intellect and activity of the two branches of the Teuto-Celts into different directions. France, ever since she became a nation, has exercised extraordinary influence on land, and her immense activity and brilliant intellect have considerably swayed the other continental nations; her tongue has become the universal language of Europe, and her literature a principal element in the intellectual life of the enlightened world. England's greatness has, on the contrary, rendered itself more conspicuous on the ocean. There, for centuries, she has reigned triumphant; and although Teutons are allowed to be better seamen than Celts, yet the Teuto-Celt has far excelled the pure Teuton as an ocean warrior. The phlegmatic obstinate persistence of the Dutch sailor has seldom or never been capable of competing with the vehement ardour of the British tar, which "rivals lightning's flash in ruin and in speed". Even the stalwart, resolute Dane, the pure descendant of the redoubtable sea-kings, had, after an obstinate and glorious resistance, to succumb to the fiery impetuous Teuto-Celtic Nelson at the head of his enthusiastic and chivalrous British seamen. Her insular situation and her well-tempered finely mixed Teuto-Celtic race have made Britain the supreme empress of the ocean; while, on the other hand, her position in continental Europe, along with her Teuto-Celtic blood, has made France the æsthetic and martial queen of all the other continental European nations.

A Teuto-Celtic race extends from the northern shores of the Shetland Isles to the Gulf of Lyons; from Bavaria and Switzerland to the Scilly Isles and the coast of Connaught. To develop this race to its present excellence, centuries of invasion, war, and conquest, were required. The firmness of the rock was to be united to the impetuous lightning flash; the fiery vehemence of the Celt was to be blended with the relentless sternness of the Teuton; the ideal intellect was to be combined with the intellect of fact; subtle disquisition and sparkling wit were to be associated with cool deliberation and sagacious humour; huge energy was to be coupled with matchless adroitness; centralising sociality was to be moderated by repelling individuality; and all these qualities in the course of time, after long-continued and terrible wars, numerous invasions, and several conquests, had done their work, have been intimately amalgamated into a most wonderful whole; so that a mixed race has at last been produced which is, for ages, to rule the destinies of the universe. Hereafter France and England must maintain an inseparable alliance; the interests of the world; the future prosperity of humanity; their own self-defence demand that it should be so; a

truth which the present French Emperor seems to perceive more clearly than most men.

The Crimean war, with all its evils and disasters, has had this very great advantage, that it has much helped to remove the old enmities between French and English, to lay the foundation of a permanent friendship between them, to bring out their common sympathies and racial affinities, and to convince them that their mutual interests require that they should continue in peace. Never before since the time of the crusades did two peoples march together to "glory or the grave" with so much reciprocal esteem and admiration; never since that chivalrous age were they inspired with a higher opinion of the cause in which they were engaged. They felt convinced that they had espoused the cause of universal liberty in opposition to that of relentless tyranny; but, independently of this, they instinctively felt that they were marching to defend the superiority which they had themselves acquired and which they had possessed for many centuries. The French and English being the dominant nations of the world, it was to be decided in the Crimea, around the walls of Sebastopol, whether the Teuto-Celts or Slavo-Sarmatians were to hold precedence among the races of men. Fierce battles were fought, and brilliant victories gained by Teuto-Celtic soldiers. The massive animal force, superstitious devotion, and rigid endurance of the great eastern European race, were not found a match for the nervous activity, the enthusiastic, daring, and fiery resolution of the occidental. The Crimean war has clearly decided the warlike superiority of the Teuto-Celtic race over the Slavo-Sarmatian; and as long as the two great branches of the former, French and English, continue on amicable terms, Russia must direct her ambition for sovereignty to Mongolian territory, and turn her back on the western regions of Europe. The Teuto-Celt has crushed the ambitious aspiration of the Slavo-Sarmatian for universal empire on the ruins of Sebastopol.

There could not be a more valuable contribution to the science of man than a good history of this war, and, accordingly, two very able volumes on the subject have appeared by Mr. A. W. Kinglake. History is one of the most important departments of human knowledge, and a department which is of indispensable service in the study of human nature. Little can be done in anthropology without its aid; for it is from human action on a Greek scale, when large masses of human beings are put in operation, that we can study human character in all its breadth. Man can hardly be understood when considered as isolated from his fellow; it is in groups in social relations with each other, both amicable and inimical, that human passions, feelings, instincts, and intellectual aptitudes, are developed and manifested. War, from its

terrible nature and serious consequences, brings human passions, virtues, vices, and abilities more into operation than any other movement; and on this account it must always continue to be one of the principal themes of the historian. History holds a middle place between art and science. Like art, it delineates and portrays men and actions so as to present the reader with a life-like view of things, and impart to him a concrete knowledge of men and women, as real and living, actuated by motives, prejudices, and impulses; like science, it analyses and digests facts in order to expound the general principle on which living action depends. When history is written purely in reference to artistic effect, it leaves the student ignorant of the abstract principles which form the groundwork of the living actions which he contemplates; and when written purely as science, it resembles anatomical dissection, which describes the various parts of a dead body, but conveys no idea of that body when influenced and put in action by thought, reason, and feeling. In Mr. Kinglake's book many of the qualities of a superior historian are to be traced; his descriptions are vivid and picturesque; his portraits of character well-conceived and vigorously delineated; and his penetration into the characters of nations and individuals keen and powerful; while his style, dignified and eloquent, has a magnificent flow admirably adapted to the lofty theme on which he has undertaken to write. His long disquisitions on diplomatic matters are, however, tedious and over-laboured; and on these points few will admit that he is at all happy in arriving at correct conclusions. He is evidently too prejudiced against the French Emperor to estimate his character with impartiality; and the biassed view that he takes of this extraordinary man, is a great blemish in a work possessed of such rare and superior merits.

Men rise up at certain periods whose very natures are, some way or other, involved in mystery. They are the glory, jest, and riddle of the world; but the jest and riddle because they are not understood. It is difficult to prevent the history of those men from being involved in mysticism. They afford a fertile theme to those who love the marvellous, and are a sure stumbling block to the sober mind that cannot distinguish the line of demarcation between the common-place and the extraordinary. Like rivers, the sources of which have not been discovered,—like narrow, tortuous caves which have never been explored,—like objects seen by moonlight, when the sky is mostly overcast with clouds; some men appear vague and undefined to the mind's eye. Such men are usually an insoluble problem in their own age; they are men who ascend to a conspicuous position, but whose mode of ascent cannot be very well ascertained;—men who exercise an influence of which they are not themselves entirely conscious, and who owe that

influence to something in their nature which bears upon momentous events;—to this class of men belongs Louis Napoleon. Along with his great talents there is one thing especially which has materially helped his success, and that is his being pre-eminently a Frenchman, or Gaul, possessed of all the social sympathies, the mental aptitudes, and some of the weaknesses which belong to the Gallic races. His uncle had led the French in many battles, and had added to the glory of the nation by winning so many signal victories; and all nations of Celtic origin are excessively fond of every kind of glory—military, scientific, or literary. The names of those who have added to the renown of their country, Celts never forget. The memory of Napoleon Bonaparte was, therefore, dear to France, and the sad termination of his illustrious career rendered it still dearer to them, enhanced his good qualities in their estimation, and effaced the recollection of his bad ones from their minds. But Napoleon I was not a Frenchman, and had nothing of the Celt in him. It is seldom that a man of one race can thoroughly appreciate men of another, however expansive the intellect, and however great the genius; and, accordingly, Napoleon I never fully appreciated the French character. “The French have but one sentiment, vanity,” says he;—a proof how little he could enter, notwithstanding his great abilities, into Celtic sentiments. To this may his downfall be chiefly ascribed. Had he fully understood Celtic sentiments there are strong reasons for believing that he had never been an exile in Elba, or a prisoner in St. Helena. His nephew, one himself of the race that he governs, thoroughly fathoms the deep sympathies, and fully appreciates the social tendencies of the Celts. Hence the wonderful progress of France, so obvious to the whole world, which has taken place during the period he has swayed her destinies.

The explanation given of the *coup d'état* by Mr. Kinglake seems to be dictated by strong prejudice and strikes an unbiassed reader as being extremely partial. The peculiar state of France at the time is not, perhaps, yet properly understood. In tumult and turmoil cruelties are committed, but how this happens is a question to which a satisfactory reply is not easily given. Of this *coup d'état* we have, as yet, but very contradictory accounts and explanations; and, certainly, if it did prevent a massacre upon as large a scale as that of 1849, the forethought of the author of it cannot but be admired.

The view that Mr. Kinglake takes of Louis Napoleon's courage is by no means in keeping with this author's usual sagacity. There is a rough, coarse personal courage, or rather rashness, which operates without considering consequences—a kind of courage which is in a great measure the result of strong health, exuberant animal spirits,

and immense self-confidence. This species of courage is, doubtless, a useful ingredient in masses,—it is, in reality, the courage which belongs to the herd of some races,—to the Teutons in Europe and to the Tartars in Asia ;—but it is not the courage of the Celtic race,—it is not the courage of the Celtic man. The courage of the Celt is founded on imagination and sentiment ;—it depends upon an idea and feeling of perfection,—it is moved and actuated by hope and fear ;—it is fed by the nervous system rather than by the vital organs, and is entirely regulated by the consideration of consequence. It is among Teutons that we meet with *Berserkers*,—men who will, under every condition, fight, regardless of consequences. More than most other races, they stand adversity without changing colour, and maintain their spirits and *sang froid* under the greatest reverses. The ancient Norsemen defied wounds and torture, and died without shedding a tear in their agony. Ragnar Lodbrog winced not when stung to death by serpents. This physical endurance—this defiance of fate, is principally owing to an extraordinary development of heart, stomach, and lungs, which this race possesses, and which makes those belonging to it fonder of feasting and revelling than any other people in the world. In the Norse tales, hell is defined as “a place where meat is scarce”. This animal courage does not belong to Louis Napoleon, or to the Celtic race which predominates in him. He is principally of a race that can bear hunger better than torture or reverses ; but the Teuton can bear the most of evils better than hunger. In all those cases in which Mr. Kinglake charges Louis Napoleon with cowardice, the reader who calmly considers the circumstances, will find that his conduct was regulated by prudence and a clear foresight of results ; and as for any alteration in his expression during those critical moments to which this author refers, it is perfectly evident that it proceeded from a sensitive nervous temperament and not from any deficiency of courage, a quality which has always appeared so conspicuous in him when it was to serve a purpose. It is, therefore, much to be regretted that an author who has so truthfully and vividly sketched so many distinguished characters, should be so strongly prejudiced against the Emperor of the French as entirely to misunderstand him.

Overlooking these faults, Mr. Kinglake's volumes may be read with much profit by the anthropologist who is desirous of becoming thoroughly acquainted with the racial characteristics of British, French, and Russians. The following sketch of Lord Palmerston gives some idea of his power in portraying individual character :—

“To those who know anything of Lord Palmerston's intellectual power, of his boldness, his vast and concentrated energy, his instinct for understanding the collective mind of a body of men and of a whole

nation, and, above all, his firm, robust will; nay, even to those who only know of his daring achievements—achievements half peaceful, half warlike, half righteous, half violent in many lands and on many a sea—the notion of causing him to be subordinated to Lord Aberdeen in Foreign Affairs seems hardly more sound than a scheme providing that the greater shall be contained in the less. Statesmen on the Continent would easily understand this, for they had lived much under the weight of his strenuous nature; but at that time he had been much called upon to apply his energies to the domestic affairs of England. Besides, he had been more seen in his own country than abroad, and for that very reason he was less known, because there was much upon the mere outside which tended to mask his real nature. His partly Celtic blood, and, perhaps, too, in early life, his boyish consciousness of power, had given him a certain elation of manner and bearing which kept him for a long time out of the good graces of the more fastidious part of the English world. The defect was toned down by age, for it lay upon the surface only, and in his inner nature there was nothing vulgar nor unduly pretending. Still, the defect made people slow—made them take forty years—to recognise the full measure of his intellectual strength. Moreover the English had so imperfect a knowledge of the stress which he had been long putting upon foreign governments, that the mere outward signs which he gave to his countrymen at home—his frank speech, his offhand manner, his ready banter, his kind, joyous, beaming eyes—were enough to prevent them from accustoming themselves to look upon him as a man of stern purpose. Upon the whole, notwithstanding his European fame, it was easy for him at this time to escape grave attention in England.

“He was not a man who would come to a subject with which he was dealing for the first time with any great store of preconceived opinions, but he wrote so strenuously—he always, they say, wrote standing—and was apt to be so much struck with the cogency of his own arguments, that by the mere process of framing dispatches, he wrought himself into strong convictions, or rather, perhaps, into strong resolves; and he clung to these with such a lasting tenacity, that if he had been a solemn austere personage, the world would have accused him of pedantry. Like most gifted men who evolve their thoughts with a pen, he was very clear, very accurate. Of every subject which he handled gravely he had a tight iron grasp. Without being inflexible, his will, it has been already said, was powerful, and it swung with a great momentum in one direction until, for some good and sound reason, it turned and swung in another. He pursued one object at a time without being distracted by other game. All that was fanciful, or for any reason unpractical, all that was the least bit too high for him or the least bit too deep for him, all that lay, though only by a little, beyond the immediate future with which he was dealing, he utterly drove from out of his mind; and his energies, condensed for the time upon some object to which they could be applied with effect, were brought to bear upon it with all their full volume and power.”

WRIGHT ON BRONZE WEAPONS.

At the recent meeting of the British Association at Birmingham, Mr. Wright read a paper entitled "On the True Assignment of the Bronze Weapons, supposed to indicate a Bronze Age in Western and Northern Europe." The paper is a very fair attack on the classification of the Northern antiquaries respecting the stone, bronze, and iron ages. The subject is one of great interest and importance; and this has induced us to give some copious extracts from this communication. Mr. Wright, at the end of his paper, appears to us to have gone somewhat out of his way to attack the views recently promulgated by the illustrious anthropologist M. Nilsson, respecting the supposed colonisation of this country by the Phœnicians, and goes so far as to say it is "unworthy of the serious consideration of the antiquary." We believe M. Nilsson's theory is eminently worthy of the most serious attention of the anthropologist; and we have consequently devoted a space to show what his views really are.

Mr. Wright commenced by observing :—

"Within a few years there has come into existence, I will not say a new science, but certainly a new and very extraordinary field for scientific inquiry. Not long ago, antiquaries limited their knowledge of the remains of human industry in this part of the world to a few generations, at most, before the date when we are made acquainted with its inhabitants by the Roman historians, and everybody was satisfied with the biblical account, that mankind had existed upon this earth somewhat more than six thousand years. It is but recently that we were all surprised by the announcement that flint implements, which had evidently been formed by man's hand, had been found in the geological formation known by the name of drift. As soon as this discovery became an accepted fact, and more general attention was called to the subject, it was discovered that these flint implements, instead of being rare (as we might perhaps have expected), were, in many parts where the drift was examined, so abundant as to imply the evidence of a considerable population at a period of course preceding the formation of the drift itself. These implements present a great uniformity in shape, and to some degree in size,—at all events, there are only two or three

varieties, and it is remarkable that, while the fossil bones of various animals are found in the same drift, there has been as yet no authentic discovery of human bones; yet there appears to be no room for doubt that these implements are really the work of man. Of course, according to the opinions of geologists on the age of the drift, this discovery would carry back the existence of man on earth to an immense distance beyond the biblical date, and it leaves us for speculation and theory a period of far greater extent than the whole historical period. The question of the Antiquity of Man became thus an attractive, and even an exciting study. It happened that the northern—the Scandinavian—antiquaries, whose peculiar fault is a spirit of too hasty generalising, had already started an ingenious theory in relation to these pre-historic times, according to which these were divided into three periods or ages, distinguished by the names of stone age, bronze age, and iron age. During the first of these periods, metal was unknown to man, and stone was the best material he had for the manufacture of weapons or of other implements for cutting or hammering; the second was characterised by the use of bronze as the only metal; in the third, bronze had been superseded for these purposes by iron. This system of periods was eagerly embraced by the new school of pre-historic antiquaries, who have even refined upon it and divided at least the first two periods into subdivisions.

“It is this dark and mysterious pre-historic period which has furnished the subject treated in the handsome volume recently published by my friend Sir John Lubbock, which treats successively on the system of periods or ages just mentioned, on the tumuli of the pre-historic times, on the lake habitations, shell mounds, and caves, on the more general subject of the Antiquity of Man himself, and on the manners of modern savages, which the author employs very judiciously to illustrate those of the savages of pre-historic ages, for absolute savages at all times bear a certain resemblance to one another. I will only add, as to the book itself, that it is a well written and well arranged work, characterised equally by purity of language and by its singular clearness and perspicuity, while it presents a view of the whole subject, which surprises us by its comprehensiveness, without wearying us with what too often constitutes comprehensiveness, a close dry mass of enumerations of facts. My intention on the present occasion is to take Sir John Lubbock's work only from one point of view—so far as its talented author treats of the system of periods—a system which, it is tolerably well known that I, in common with antiquaries of some eminence in their science, reject altogether, and look upon as a mere delusion, and some parts of the first chapters of my friend's book are aimed at me; that is, they are directed against opinions which I have expressed and

which are here rightly put into my mouth, and I am glad of the opportunity of explaining my reasons rather more fully. It will be understood by everybody that whatever strictures I have to make are directed, not against Sir John Lubbock's writings, but against the opinions on the school of pre-historic archaeologists which he has adopted, and which are here stated more fairly and distinctly than in any other work with which I am acquainted.

"I am by no means inclined to impugn hastily the general conclusions to which men of science seem now arriving upon the great question of the antiquity of man—it is a subject in regard to which I look forward with anxious interest to the increase of our knowledge, certain that the ultimate result must be truth. *Magna est veritas, et prævalet.* But I complain of the treatment which the science of archaeology has hitherto received at their hands. There was a cry some time ago—and nobody joined in it more heartily than myself—that a close alliance should exist between archaeology and geology; but this was to have been a fair and equal alliance, in which the geologist should accept the conclusions of archaeology on the same footing as the archaeologist is expected to receive the opinions of the geologist. Instead of this, the geologist seems to have considered that the science he had thus to give his hand to is a vague and uncertain one,—he has created a sort of archaeology of his own, made in the first place to suit his own theories, and he takes only the advice of those who will give him an opinion which is in accordance with a foregone conclusion, and this is often quite contrary to the teachings of archaeological science. Archaeology, as a science, has now reached too high a position to be treated with so little respect. But let us go on to the more especial subject now before me.

"Sir John Lubbock alleges that 'Mr. Wright sees nothing in Great Britain which can be referred to ante-Roman times' (p. 35); and upon this he remarks (p. 36), 'But if we are to refer not only the bronze implements, but also those of stone, to the Roman period, what implements, we may ask, does Mr. Wright suppose were used by the ancient Britons before the arrival of Caesar? It would be more reasonable to deny the existence of ancient Britons at once, than thus to deprive them, as it were, of all means of obtaining subsistence.' What I have said on this subject must have been strangely misunderstood, or I may have explained myself badly; for I am entirely unconscious of having ever uttered an opinion which could bear the interpretation here given to it. I have said, and I still say, that I do not believe we have many—perhaps any—monuments of importance much older than the Roman period, and that such ancient remains as are supposed to be older than the Roman period bear no characteristics

which would enable us to ascribe them to any particular date. I have never pretended to deprive the Britons of the use of stone,—it would not be in my power; but I say that stone was also in use for the same purposes in Roman and Saxon times, and that the mere presence of a stone implement does not prove that the deposit was British any more than Roman. Stone, of various kinds, is a very ready and convenient material for purposes such as the stone implements of antiquity evidently served, and it is found in use in Western Europe even in the middle ages. Stone implements have often been found on Roman sites in this island; they have been found in Saxon graves in Kent, and I have myself found flint flakes, evidently placed there by the hand of man, in Saxon graves in the Isle of Wight, perfectly resembling those of which the geologists have talked so much of late. The Abbé Cochet found similar flint flakes in Roman graves in Normandy, so arranged as to leave no doubt that they were placed there intentionally.

“Sir John, indeed, acknowledges that implements in stone were in use in Roman times, but it was not so much a difference between the poor and the rich, as he puts it (the structure of society was altogether different from that of modern times), as between different localities. It would be very wrong to suppose that the social condition of Britain under the Romans was uniform in cultivation and condition throughout the province. There were no doubt “savages” in wild and retired parts of the island, as there have been in much more recent times, and communication between distant localities, except on the lines of the great roads, was slow and precarious. People must thus have been frequently exposed to the inconvenience of falling short of metals, which, moreover, were probably always expensive, and then they would be obliged to have recourse to stones, the use of which would thus be habitual. People, under this state of society, could not go to obtain their flint implements at distant manufactories, but must either have made them individually for themselves, or, at the most, there may have been a man in each village or rural district who was more skilful in making them than his neighbours, and supplied them to those who were able to purchase. In this manner there must have been, throughout the land, at the same time, a vast variety in the form and style of flint implements, according to local taste or individual caprice, so that it would be absurd to consider difference of form and character as a proof of difference of date. In primitive times diversity, and not uniformity, was usually the rule, and sometimes this difference of form and design became almost a family distinction. Among the Anglo-Saxons, long after they had risen above the character of savages, the different tribes were distinguished by different forms

of personal ornaments, and we know that in much later times the clans of the Scottish highlanders have been similarly distinguished by the patterns of their plaids.

"But enough of stone for the present—let us proceed to bronze, which forms the grand corner-stone of the edifice of this system of periods. We may, perhaps, consider as the most important of these objects of bronze the swords, because they present a greater number of peculiarities of form than any of the other classes, and the circumstances connected with their discoveries seem at a first glance of the subject to suggest more difficulty in identifying them with the Romans; I shall, therefore, take them as the special object of my investigation, but the arguments I shall use with regard to them apply with still more force to the other objects made of the same metal. . . .

"Sir John asserts that 'bronze weapons are *never found associated* with coins, pottery, or other relics of Roman origin;' he then proceeds to quote a statement of mine to the effect that on all the sites of ruined Roman towns these other objects are found scattered about rather abundantly; and he adds somewhat triumphantly, 'We may assume, then, on the authority of Mr. Wright himself, that, if all these bronze arms were really of Roman origin, many of them would have been found from time to time in conjunction with other Roman remains.' I can admit of no such assumption as arising from the facts I have stated; and I am sorry to be obliged to say that this remark only shows that my friend, in common with the advocates of this system of periods generally, is but imperfectly acquainted with the archaeological conditions of the question. The reason we do not find bronze swords under the circumstances which he insists upon, is a very simple one, easily explained, and applies to iron swords equally with bronze swords. The Romans did not bury their weapons with the dead, and they took great care of them, especially of the sword, while alive. Even in the last struggles of the empire, when the Romans must sometimes have been obliged to leave their weapons behind them, the barbarians, among whom we know that a sword was an object of inestimable value, took very good care to carry them away. The consequence of this is that a Roman sword in iron is one of the rarest objects in antiquarian discovery. I remember, within my own observation, hardly a single instance of one having been found in Roman Britain, and not above two swords supposed to have been found here, and it is my impression that the bronze handle of one of the latter presented a considerable resemblance, in its style of ornament, to those of some of the bronze swords found in Scandinavia. During the whole of our excavations at Wroxeter, which have filled a considerable museum with articles of Roman fabrication, we

have never met with the smallest fragment of a Roman sword, nor do I remember a single instance of such a find on any site of a Roman town or villa in this island. In one or two cases in the west of England, as in the very remarkable discoveries at Hod Hill, in Dorsetshire, bundles of unfinished iron blades, which looked like swords, have been discovered under circumstances which appeared to me to show that they had been government stores on their way to some imperial manufactory where the finish was to be given to them; other antiquaries thought they were not swords at all, and I think they may be right; but it is a very remarkable circumstance that among the Roman antiquities found at Hod Hill there was one undoubted iron sword-blade, and this was in every respect *an exact copy* of one of the swords in bronze, of which we are now speaking, a proof beyond doubt that the latter were at that time well known. This Roman sword-blade possesses the characteristic leaf-shape, with the ribs, and the holes for the rivets, by which the handle was fixed on. The fact of no Roman swords in iron being found, would be rather in favour of the bronze swords being Roman. Again, Sir John Lubbock gives as one of his arguments against me the fact that the bronze and iron swords and other implements are not found mixed together in the same locality. It seems to me that this is exactly what we might expect, especially in the case of the swords. These, as I have just observed, were valuable articles, and were probably, at least in the provinces, in possession of few individuals, except the military. The inhabitants of a lacustrine village, for instance, were not likely to be in possession of a sword, unless they had stolen it, and whence would they steal it? From some soldier belonging to the nearest military post. I am sure that Sir John Lubbock will allow that it has never been the custom to arm any corps of troops with a variety of weapons—if their swords were bronze, they were all bronze, if iron, all iron. The discovery, therefore, of weapons in any particular place would only necessarily show that it was the weapon with which the detachment of Roman troops stationed in that neighbourhood—or, at least, nearest to it—were armed. But I think that it is stated rather rashly that bronze swords are not found with iron swords; for in the very rare instances of the discovery of Roman iron swords found in Britain, in, I believe, almost a majority of cases they have been found associated with bronze swords. A few years ago a Roman sword in a bronze scabbard, the blade appearing from the rust to be of iron, was dredged up from the Thames, along with a very fine specimen of the well-known bronze leaf-shaped sword, and a large stone celt, all which are now in the museum of Lord Londesborough, at Grimston Park, in Yorkshire; and a similar iron sword in a bronze scabbard was

found together with a bronze sword in the river below Lincoln, at a spot where a bronze circular shield had previously been found. The discovery, in one or two instances, of a mass of bronze implements, with no mixture of iron, leads only to the conclusion that they had formed the stock-in-trade of some dealer in bronze implements, or that they had been a consignment of such articles lost on the way. But of this I shall say more.

"I must, however, state generally that the archæological fact is that, instead of our *not* finding the bronze swords in juxtaposition with Roman remains, in every case where they have been found in Britain or Gaul, where the details of the discovery have been carefully observed, it has occurred under circumstances which lead to the strongest presumption of their being Roman. A bronze sword, of the usual leaf-shaped type, is stated to have been found at the Roman station of Ardoch in Scotland, on the wall of Antoninus, and there appears no reason to doubt the accuracy of the statement. But, to come further south, it is well known to the archæologist that the great treasury of the antiquities of Roman London—and of mediæval London also—is the mud of the river Thames, and within the limits of the town, I believe that no object has been found that could claim an earlier date than Roman. This is just the place where objects of all kinds would be deposited by accidents, such as boats upsetting in the transit, people falling in and being drowned, and the dropping into the water of objects of various kinds which would sink by their weight. Now swords have been found in the Thames at London, and I should underrate the number in saying a few, but they were nearly all of bronze, and leaf-shaped in form, which might almost be taken to show that this bronze sword was most in fashion among the Romans in London. Certain it is, that my friend Mr. Roach Smith, who has examined these Roman antiquities of London more extensively and deeply than anybody else, and whom I have no hesitation in saying that I regard as the first authority on the antiquities of the Roman period in England or even on the continent, is convinced, equally with me, that the bronze swords are of Roman manufacture or origin. Discoveries of the axes, chisels, and other implements of bronze, have been much more frequent, and in positions which speak still more strongly of their Roman character. Thomas Hearne, who first called attention to these objects more than a century ago, took it for granted that they were Roman, but he unfortunately gave it as his opinion that they represented the Roman *celltis* (a technical word for a sort of chisel), and, in the low ebb at which archæological knowledge has stood from his time down to the present generation, antiquaries seem to have blindly fallen into the mistake that the name *cellt* (*celltis*) was

equivalent to *Celtic*, and that it meant that they belonged to the ancient Britons. In this blunder solely, I believe, originated the notion that these 'celts' are not Roman.

"Let us now cross the Channel to our neighbours, and see what is the case in Gaul. France has undoubtedly produced by far the ablest, the soundest, and the most judicious antiquaries of modern times; and I believe that they have all regarded the bronze swords, equally with the other bronze implements, as Roman. I will quote the authority of Monsieur de Caumont, to which I am sure that nobody who knows anything of archæology will object. In his *Cours d'Antiquités Monumentales*, De Caumont, in speaking of these so-called 'celts', says, 'But we find also very frequently these bronze axes in places covered with Roman ruins; I have acquired the certainty of this by my own observations and by the information I have collected in my travels.' Again, the same distinguished scholar, in speaking of the bronze swords, after noticing the opinion of a previous writer who thought that the Gauls had derived the use of these swords from the Greeks, goes on to say, 'At all events, I must not conceal from you the fact that the bronze swords have been found sometimes along with objects of Roman manufacture, which would seem to announce a different origin.'

"I will go back a little farther among the antiquaries of France to produce not only opinions, but facts, such as I think ought to set the whole question at rest. At the beginning of the present century flourished the able antiquary Antoine Mongez, one of the most celebrated members of the Institute of France, a man distinguished for his science and learning, and for his judicious use of them. On the 16th of Prairial, an 9 (for we are still in the days of the republic), according to our reckoning the 5th of June 1801, the "citoyen" Mongez read at the Institute, before what was then called the Class of Literature and Fine Arts, but which is now represented by the Académie des Inscriptions et Belles Lettres, a memoir on an ancient bronze sword, which had been found with the skeleton of a man and horse, in a turbarry (*tourbière*) near Corbie, at Hailly, in the valley of the Albert, a tributary of the Somme. In this memoir, which is published in the volume of the papers read before the class, this sword is described, and figured in an engraving; it is entirely of bronze, blade and handle. The object of Mongez was chiefly to analyse the bronze of which this sword was made; but he also enters into the question of what manufacture it might be, and, after careful discussion, he arrives at the conclusion that these bronze swords were all Roman. On the 8th Frimaire, an 10 of the Republic, or the 29th of November 1801, in

our reckoning, M. Mongez read another paper on three bronze swords which had been recently found near Abbeville, and which resembled the other so closely that he thought it unnecessary to have them engraved. Mongez re-considered the question, and again pronounced them Roman—*je les crois Romaines*.

"After Mongez had read his Memoires on the bronze swords before the Institute, his opinion received a singularly remarkable confirmation in a more exact and complete account of the circumstances of the discoveries, which he obtained from a very zealous and able antiquary of Abbeville, M. Traullé. The bronze sword, as just stated, was found in the turbary at Heilly along with the skeletons of a man and a horse, and by the sword were four brass coins of the Emperor Caracalla, who, as is well known, reigned from A.D. 211 to 217. This sword, therefore, was that of a Roman cavalry soldier, not older, and perhaps a little later, than this reign, who had sunk in the bog to which the turbary had succeeded. The history of two of the other swords, found in a turbary at Pequigny, near Abbeville, was, if anything, still more curious. A large boat was found, which had evidently sunk, and in it were several skeletons. One of these had on his head a bronze casque, or helmet, accompanied with the remains of the other accoutrements of a soldier. The bronze sword lay by his side, and with it some Roman coins, some of which, if not all, were middle brass of the Emperor Maxentius, who reigned from 306 to 312. Another similar sword was found in the turbary outside the boat, which would appear to have been sunk in a skirmish after some of its crew had been killed in it. We learn here that Roman soldiers, in the wars and troubles which agitated Gaul in the third and fourth centuries after Christ, were armed with these bronze swords which some have so ingeniously supposed to have been brought into this island by the Phenicians, some seventeen or eighteen hundred years before the Christian era. From the time of Mongez, the French antiquaries have regarded the bronze swords as Roman.

"I have thus crept on from one little, though significant, fact to another, until it seems to me tolerably clear that they all point to one conclusion, that the bronze swords found so often in different parts of western and northern Europe are Roman; that is, that they were all either of Roman manufacture, or, at the least, copied from Roman models. I consider that this evidence is sufficiently strong, but still it will be worthy of inquiry, whether it be confirmed by pictorial delineations on Roman monuments. I have no doubt that with a little labour we might bring together a mass of corroborative evidence of this description which would be quite irresistible, but I regret to say that pressing engagements of a different character will not at present allow

me to undertake that labour myself to its full extent. I think, however, that I can produce a few very satisfactory samples of it—and I will only take them in two classes of such monuments.

“First, as to the sculptures on stone, the figure of a Roman soldier, generally on horseback, is a common adjunct to sepulchral inscriptions found in the Roman cemeteries. Unfortunately, the soldier usually has his sword by his side in its sheath, and although the shape of the sheath would lead us to believe that they did hold blades of the different known forms of the bronze swords, yet we cannot insist upon it. If the sheath were made of the form of the blade of a leaf-shaped sword, of course the blade could not be drawn out, it is, therefore, represented in one uniform shape, distinguished only from any ordinary scabbard by being short. However, I feel convinced that I have seen one or two of these sculptures in which the Roman soldier held the sword drawn, and in which it was clearly leaf-shaped; but I cannot at this moment put my hands upon them. If any one, however, will take the trouble to look over the plates of that readiest of all books of reference, the père Montfaucon's *Antiquité Expliquée*, he must be convinced of the absurdity of denying that these swords are Roman. In the sculptures on the arch of Constantine at Rome, about contemporary with the bronze swords found near Abbeville, and described by Mongez, the Roman soldiers are evidently armed with the leaf-shaped swords, as well as with the other forms, a circumstance which brings into immediate relation the forms and the metal. . . .

“We see at a glance that the dagger with which Cæsar was slain was identical in every particular with those found in the tumuli of Britain, which some antiquaries are now ascribing to the remote age of Phœnician colonies!

“Thus we see that the bronze swords, the bronze shields, the bronze spears, the bronze daggers, which have been found in Britain, are all Roman in character. The so-called ‘celts,’ chisels, etc., bear the same character with the weapons, and are sometimes found with them, and probably continued in use later. It is my firm conviction that not a bit of bronze which has been found in the British islands belongs to an older date than that at which Cæsar wrote that the Britons obtained their bronze from abroad, meaning, of course, from Gaul, *cere utuntur importato*. In fact, these objects in bronze were Roman in character, and in their primary origin.

And who has ever brought forward any evidence to show that the Romans did not use bronze for their weapons? Pliny tells us that, in the treaty which concluded the war between Porsena and the Romans after the expulsion of the Tarquins, that is about five hundred years before Christ, it was expressly stipulated that the Romans thenceforth

should use iron for nothing but agricultural purposes. Our acquaintance with the condition of that time is not sufficiently minute to enable us to judge what was the cause or the object of this stipulation, but it seems clear that swords were not made of iron, and they must, therefore, have been made of bronze. This stipulation continued in force during some three centuries, and it was only after the second Punic war, we are told, that the Romans began to adopt the form and material of the sword as it was in use among the Spaniards. Polybius tells a curious anecdote relating to the great victory obtained by the Romans over the Gauls during the consulate of Caius Flaminius, a little more than two hundred years before Christ. He informs us that the Gauls were armed with long pointless swords, which they used only in striking the enemy, while the Romans used short, stiff, pointed swords, with which they stabbed at the face and person. When the Gauls struck hard, the blade of the sword became so much bent that the soldier had to straighten it with his foot before he could strike another blow. The Roman officers, having observed this, directed the soldiers to close upon the ranks of the Gauls, and thrust vigorously at their bodies and faces before the latter had time to recover the use of their swords, and by this manœuvre the great inequality of numbers was partly compensated.

"When Sir John Lubbock (p. 35) says that I "lay much stress on the fact that the bronze weapons have generally been found near Roman stations and Roman roads," he has applied to the weapons what I had said of a rather different object. During ages when travelling was neither quick nor safe, and people seldom took long journeys unnecessarily, they had to depend for many even of the necessities of life upon men who carried them round for sale periodically, and a multitude of people gained their living as itinerant traders and manufacturers. It was a practice general throughout the middle ages, no doubt derived from the Romans, and the very utility of such dealers formed their protection against injury and interruption. We find abundant traces of this practice, curiously enough, in relation to the bronze swords and hatchets. These consist in discoveries of deposits, usually of an earthen vessel for melting bronze, of which there is sometimes a residuum at the bottom, of moulds for casting the implements, and generally of some broken swords or other bronze implements, no doubt intended to be melted down for metal, and of similar articles entire, constituting stock in trade. Now my remark was, that these tools and stock of itinerant bronze manufacturers are almost always found near a Roman road, or in the neighbourhood of a Roman station, and that therefore we are justified in considering them as Roman subjects, who had travelled along the Roman roads, and rested

at those spots for personal or local reasons which are unknown to us. Discoveries of such deposits have been very numerous in Britain, Gaul, Switzerland, and Germany. I am not aware if they have been found on the other confines of the empire. One of these, consisting of a quantity of bronze celts, both entire and broken, was found near the foot of the Wrekin in Shropshire, not far from the great Roman road, the Watling Street; another, among which there were fragments of a bronze sword, at Sittingbourne, on the Kentish portion of the Watling-street; a third, consisting of bronze punches, chisels, and other implements, with several pieces of unused metal, one of which was evidently the residuum of the melting-pot, at Attleborough in Norfolk, on the Roman road between Thetford and Norwich; a fourth, consisting of sixty bronze chisels, etc., with a portion of a bronze sword and a piece of bronze which again appeared to be the residue from melting, all contained in an earthen pot, at Weston in Yorkshire, on the road from Old Malton (where there are the remains of a Roman town) to York. It is not necessary to enumerate any further examples. Sir John Lubbock seeks to explain the position of these finds by supposing that the Roman roads were laid upon older British roads, but this is an objection to which I cannot listen until he brings me the slightest substantial evidence that such was the case. To me, these "finds" alone are sufficient to explain a fact which Sir John hardly, or only feebly, denies, the identity of forms, and not mere similarity, of all these bronze swords, in whatever part of Europe they are found. I cannot imagine that any one will believe that this identity of form, is the result of chance, but they must have been derived from one general centre; and, when we consider the radius through which they are scattered, it was only the Roman empire that could have supplied such a centre. It is nonsense to suppose that, brought into Britain at a remote and obscure period by the Phœnicians, they could have spread in this manner. The whole mystery, then, is dispelled by the proceedings of these itinerant manufacturers, who must have been very numerous, and who went not only to the limits of the Roman province, but, no doubt, penetrated into the surrounding countries, and made weapons for their inhabitants. It was, for these, the easiest way of obtaining weapons. Swords were so rare, and so valued, among the Scandinavians and Teutons, that they believed them to have been forged by the gods; and I beg to state that the arms which the gods forged were made of iron. There are many reasons, into which I will not now enter, for believing that it was a subject of honour and glory, among the different branches of the Teutonic race, for a man to possess a sword; and here the "barbarian" had a chance of getting a sword to wear by his side at not so great an expense of wealth and

trouble as if it had been made by the gods, and he no doubt profited largely by it. And then, the "barbarians," contrary to the Roman practice, buried their weapons with the dead, in consequence of which we find in their graves a sufficiency of those weapons to fill our museums, while we only pick up one now and then within the bounds of the Roman empire. Such is the case with Ireland, where, by the way, it has been somewhat too hastily asserted that the Roman arms never penetrated, seeing that we know little of the *history* of our islands under the Romans,—that Juvenal, speaking as of a fact generally known, asserts,—

"Arma quidem ultra
Litora Juvernæ promovimus",—

and that Roman antiquities are now found in Ireland. Such is the case with Scandinavia, and also of the other countries of Europe bordering upon the Roman provinces. It has been alleged that some of the ornamentation of the Scandinavian bronze-work is not Roman in its character, which is true—but why? It is not probable that an enterprising people like the Scandinavians would be satisfied to remain long dependant on the precarious supplies, as they must have been at such a distance, of wandering merchants, and they would soon learn to imitate what they had seen done by others. Roman ornamentation and design, in their hands, would soon undergo degradation, until it took a character of its own, just as it did among the Anglo-Saxons, and among the Germans, and indeed among all the other non-Roman peoples into whose hands it fell. I have always held the belief that the mass of the Scandinavian ornamented bronze is nothing more than the development of Roman popular art under the influence of barbaric taste; and I think this will hardly be denied by any one who is familiarly acquainted with the forms and spirit of Roman art."

Mr. Wright concludes as follows:—"I will only repeat the belief, on which I have always insisted, that in this part of the world the use of bronze did not precede that of iron, and I believe that I am fully supported in this view by the opinion of our great metallurgist, my friend Dr. Percy. At the time of Cæsar's invasion, as that great warrior and statesman declares deliberately, the only bronze known to the Britons was imported; of course from Gaul, and it could not have come in large quantities. The Britons could not have made bronze themselves, for I am satisfied, by my own researches among our ancient mines, that no copper was obtained in this island until it was found by the Romans. I am informed that, instead of being easy, the process of mining copper or tin, and preparing bronze, is very complicated and difficult; whereas the smelting of iron is extremely easy, and in some parts of our island, as in the forest of Dean, the iron ore

presented itself on the surface, and in a form which could not fail to draw the attention of men who knew anything about metals. I confess that I only look upon the modern myth of the colonisation of this island by the Phœnicians as unworthy the consideration of a serious antiquary. It is based upon speculations which have no historical foundation. In these new questions which are agitated by men of science, we must enter upon the study of the remote period of archaeology of which we have no practical knowledge, with a very profound knowledge of the subsequent historic period; whereas this new school of antiquaries prefer contemplating altogether the doubtful period speculatively from the utterly unknown period which preceded it, to going back to it from the known period which followed. Indeed, I fear that far too much of prehistoric archaeology, as it has been hitherto presented to us, rests only upon a want of knowledge of what is historic."

We cordially agree with Mr. Wright in the last paragraph, and think he has done a good service in pointing out this fact.

NILSSON ON THE BRONZE AGE.

THREE decades have nearly elapsed since Sven Nilsson, the eminent Swedish anthropologist, published a large work "on the primitive inhabitants of Scandinavia, etc."* The book now before us is the first part of a new and enlarged edition,† which Prof. Nilsson is publishing, and which is entirely devoted to the bronze age. The fundamental theory which pervades the whole of the first section amounts to nothing less than this—that neither the Celts nor the Goths introduced civilisation and bronze into the North, and especially into Scandinavia, but the *Phœnicians*, who established factories, built temples, introduced Baal-worship, and remained in Scandinavia for so long a period, until, by intermixture, they became gradually absorbed in the mass of the native population.

That such a theory, so contrary to all current notions on this subject, will and must greatly stagger the archaeologist, historian, and

* *Skandinaviska Nordens Ur-Juwanare, ett Försö i Komparativa Ethnografien och ett Bidrag till Menniskosläktets Utvecklings-Historia.* Lund, 1838-1843. "The Primitive Inhabitants of Scandinavia"; an Essay in Comparative Ethnography, and a Contribution to the History of the Development of the Human Species.

† *Andra omarbetade och tilltakta upplagan.* Bronsåldern (Stockholm. 1862).

even the anthropologist, is no more than may be expected. Whether or not the *facts* of our author may turn out to be *fictions*; whether his bronze *swords* are only *daggers*, as the antiquarian will have it, must be solved by archaic anthropology. Whether the account he gives of Pytheas' visit to the north will satisfy the historian, may be doubted. This much is, however, certain, that the work contains a vast amount of curious information, the result of great research, conveyed in a most attractive style. The evidence by which our veteran anthropologist supports his theory may be defective, but it cannot be sneered down, and must be seriously refuted. As no translation of this interesting work has yet appeared in England,* we feel sure that our readers will thank us for the subjoined version of some of the more important passages, which will convey a fair idea of the nature of the book. We trust that our author, now an octogenarian, may be spared to see the completion of his work. He has our warmest sympathy and good wishes for the success of his undertaking.

"The reasons which induced me to treat first of the bronze-age are, first, that little or nothing has been published amongst us on this subject; and secondly, because I have, during the last few years, chiefly, though not exclusively, been engaged in its study.

"I may be accused of boldness in expressing my conviction that our pretended knowledge as regards the pre-historic period of the Scandinavian North consists merely of philosophical speculations and poetical fictions, devoid of any real basis. It has, therefore, long been my wish to treat the pre-historical period of Scandinavia according to the same comparative method as applied to the so-called bronze age. I trust that every unprejudiced reader will admit that the results arrived at are not based upon loose hypotheses, but upon undeniable facts. Among the facts here, for the first time, I believe, adduced as proofs, I would mention the following:—1. That the emblems upon the bronze weapons are traceable to Phœnicia and Egypt, the places of their origin. 2. That the swords embellished with these emblems have short hilts, about two inches and two lines long, whilst the swords with hilts three inches long are not embellished with emblems, the cause of which I endeavoured to explain. 3. That bronze culture and Baal-worship were contemporaneous in the north. 4. That in Massilia, the home of Pytheas, Phœnician Baal-worship existed. 5. That the natural phenomena which Pytheas compares to a so-called sea-lung, occurs annually in the north. 6. That the Phœnicians introduced into the north agriculture, beer-brewing, and the preparation of mead. 7. That the Phœnicians had left behind traces of Oriental customs which

* An excellent translation into German has been published in Hamburg, by Meissner.

have persisted in historical times in several regions of Northern and Western Europe. 8. That in the fourth century before Christ there existed in England a Baal-temple. And further, since Movers, in his learned interpretation of the Phœnician stone tablet in Marseilles, has shown the analogy subsisting between the Phœnician and Hebrew ritual, we are enabled to explain why the Phœnician temple-vessels found in the north are such as described in the Old Testament.

"In the first place, we shall demonstrate that the people who introduced bronze must have been of a stock foreign to the north and the west. Of this we can easily convince ourselves by examining a collection of bronze swords and the length of their hilts; for it is quite clear that these hilts must have been so shaped that the people could handle them. . . . On close examination we find that all swords with short hilts are embellished with ornamental decorations, whilst all swords with hilts three inches long have no embellishments, and are evidently of inferior workmanship. This fact, mentioned before, was fully confirmed by my recent examination of the museums of Stockholm, Lund, and Copenhagen; it cannot, therefore, be accidental. The length of the hilts necessarily indicates the breadth of the hands which grasped them. When we inquire which of these two kinds of swords were first introduced by the foreign colonists, we must come to the conclusion that it was that sort with short hilts and oriental embellishments, which may be traced to Phœnicia and Egypt, and cannot have originated in Europe. If it be assumed that the first colonists introduced long-hilted swords without ornamentation, and subsequently adorned them with oriental figures, I cannot conceive how they could *here* have acquired the oriental art, and how their hands, which were first broad like our own, should have shrunk and become narrow, and so have become apt to grasp the hilts of the ornamented swords. On the other hand, it is very conceivable that the colonists who arrived unmixt, bringing with them their embellished articles, may, and must in the course of time have become intermixt with the natives, and that their descendants have very gradually approached the physical conformation of the natives. That this alteration must have been effected very gradually is clear, and hence we find transitional swords. We find these swords *with* embellishments which approach in length the long-hilted sword; and swords *without* ornamentation, approaching, by the shortness of their hilts, the embellished swords. We are thus enabled, on examining a bronze collection, to distinguish the objects of the oldest period of the bronze age from those of an intermediate or recent period. . . . Fortunately, connected with the short-hilted swords, are the small bracelets of bronze and gold belonging to the bronze age. These bracelets are frequently so small that no adult

female of the present race inhabiting Western or Northern Europe could slip them over the hand. They thus prove that the females who wore them must have had hands proportionately as narrow as the males who used the short-hilted swords It results, therefore, from what has been stated in respect to the gradual changes in the bronze weapons, that the Phœnicians must have dwelt in the north for a long period until they became fused with the natives; just as has been observed in other countries, where the Phœnicians settled among foreign peoples, and where they also ceased to constitute a separate nation whilst their language was also absorbed in the native tongue.

"A distinguished philologist of Dublin expressed his conviction that no Phœnicians had ever settled in Ireland, as no Semitic words are to be found in the old language of the country. I respect the conviction of every one, but I cannot share this. In Greece the only traces of the Phœnician language are found in some local names. There are also stated to exist many traces in Ireland which remind us of the Phœnicians and their worship. Some of these traces are also found in Sweden and Norway. In the vicinity of Marseilles there are found neither in the Italian nor in the French Semitic words, and yet it is known that at the last place Phœnician priests performed their worship in the Phœnician language.

"Somebody has objected, that though it may have been a people with narrow hands who introduced bronze, they may possibly have been a Hindoo people. To this I reply that the ornamentations betray their origin. We never found anything like it among Hindoo or Indo-Germanic peoples; whilst among the Phœnicians and Egyptians we may trace them back to the remotest period as far as the memory of man reaches. I trust I have sufficiently proved that bronze has been introduced into the north by the Phœnicians; that they themselves have brought it, and that they have dwelt here during a long period. . . . The question may now be asked, When did the bronze period first commence in the north? It is impossible to give a definite answer to this question; though proofs have been already given that it commenced in the north at a much earlier period than was generally imagined. Apart from the proofs already given, that the Phœnicians traded at a very remote period with Western Europe, we have undoubted evidence of their having had, at an equally remote period, stations in southern Sweden. In our oldest peat bogs in Schonen, the same in which skeletons of the aurochs and tortoise are found, indicating a period not much distant from that in which the Coast of Schonen and that of Prussia were yet connected, we find flint implements and ornaments of amber, and intermixed with them glass pearls, which prove the barter trade of the Phœnicians with the

natives at a time when the aurochs and the tortoise still inhabited the country.*

"It appears, therefore, to me, that the beginning of the bronze period, or its equivalent, the commencement of the trade of the Phœnicians in the north, lies so far back that we have no proper conception of it. This much seems certain, that the trade with the North was carried on by people from Tyre, and is much older than Carthage, which was founded eight hundred years before Christ. The trade was, however, continued by the Carthaginians and the Massilians. How long this period continued, and when it ceased in the north, cannot be determined. There are many grounds for assuming that it continued for a very long period."

ON THE ORIGIN OF THE GYPSIES.

By RICHARD S. CHARNOCK, Ph.D., F.S.A., F.R.G.S., F.A.S.L.

THE last volume of Transactions of the Ethnological Society of London† contains among other subjects, a paper by Mr. Crawford, on the origin of the gypsies.

After asserting that the "Hindu origin of the gypsies has of late years received general credence, and to some extent justly", the author of the paper forthwith sets to work to demolish the same!!! Mr. Crawford says:

"The evidence yielded by physical form will certainly not prove the gypsies to be of Hindu origin. They are swarthier than the people they live among in Europe, and this is all that can be asserted. The Hindus are all more or less black; and assuredly no nation or tribe of Hindus now exists, or is even known to have ever existed, as fair as the gypsies of Europe. It is nowhere asserted that

* "I may here quote what I said in *The Primitive Inhabitants of the North* concerning these glass pearls. 'They are of rude workmanship. The hole is not bored, but pierced when in fusion by an instrument of metal. There is no other trace of polishing than that the projecting edge is sometimes ground off. They indicate that glass-melting was yet in its infancy; but it can hardly be assumed that they were fabricated by the makers of stone implements. They clearly indicate a foreign people, which traded with the savage natives of Scandinavia, and bartered their glass, pearls, etc., for amber, fur, and other products, as is even now done in the barter trade between Europeans and the South Sea Islanders.' I wrote this more than twenty years ago, and, after further researches, find no reason to change anything in this passage."

† Vol. iii, New Series, p. 25, 1865.

the gypsies were a blacker people than they now are, when they first arrived in Europe above 400 years ago. In the features of the face the gypsies certainly resemble Hindus, but so also do all the genuine people of Europe. The Hindus have no other colour of the eyes, of the hair of the head, and of the beard than black. The most prevalent colour of these with the gypsies is dark, but not unfrequently there are to be seen with them grey and blue eyes, fair and even red hair—that variety in the colour of the integuments which is the especial characteristic of the European race. The gypsies are, in fact, a mixed race, and in blood far more Europeans than Hindus.”..... “There are no salient points of physical character that will give to the gypsies a descent from the Hindus, who themselves, but for the black colouring matter of the skin and other teguments might often pass for Europeans.”

Mr. Crawford seems to assume that as the gypsies are not absolutely black they cannot be of Hindoo origin. But the Hindoos can hardly be considered black. The only real black people are the negroes, the negroid nations of New Holland, Van Diemen's Land or New Guinea, the New Hebrides, and other islands of the South Sea. Many of the Hindoos inhabiting the northern part of Hindustan are of a light olive colour, and it is most probable that from the north of Hindustan the gypsies had their origin, passing into Europe through Afghanistan and Persia. But granted that all the Hindoos are really black, is it not possible that in the course of their wanderings the gypsies may have intermarried with people of a fairer complexion, and in time have themselves become fairer also? Considering that the colour of the skin depends to a great extent upon the texture of the cellular substance immediately under the skin, it is not at all unreasonable to suppose that a difference of food, climate, and other exterior circumstances may in time have had considerable effect upon the complexion of the gypsies. As an instance of the effect of climate and change of life on the human species, we need only compare the Yankees of the present day with the people of the mother country. It is not, however, so much a question whether the gypsies are of Hindu origin, as whether they originated in Hindustan, which contains upwards of ten millions of Arabs and Persians. Perhaps the author of the paper goes rather too far when he asserts that in the features of the face all the genuine people of Europe resemble Hindus. Except so far as they may all be said to belong to what is absurdly termed the Caucasian variety, such resemblance has not been shown. “It is in language, then” (says Mr. Crawford), “chiefly that we must rely for evidence of the Hindu origin of the gypsies, and even this is neither very full nor satisfactory. The dialects spoken by the different tribes of this people, although agreeing in several words, differ very materially from each other. They are, one and all, rude and imperfect jargons; for the

gypsies arrived in Europe totally ignorant of letters, and have, consequently no record, hardly even a tradition of their own origin." The author of the paper would seem here to admit that the gypsies did not originate in Europe; and if they did not, from what other part of the globe did they have their origin? We have assuredly no evidence of their having come from America; and their African descent is not much more probable. After referring to the intermixture of foreign terms in the gypsy language, and to parts of Hindustan the "present population of which some eighty millions as not likely to have furnished the emigrants that finally became gypsies," Mr. Crawford says "the Hindus of the Punjab, of Moultan, and of Scinde, being border nations, and speaking distinct languages, are naturally those to whom European writers have been disposed to ascribe the origin of the gypsies. The first of these, speaking the Hindi or Hindustanee tongue, the most current of all the languages of India, seems upon the whole, the most likely, etc., etc. Mr. Crawford does not seem to be aware of the fact that Hindí and Hindústání are quite different languages. There is indeed as much difference between the latter and the former, as between the English of the present day, and its base, the Anglo-Saxon. In the Hindí—a language of five dialects, spoken in Bahar, Bhojpur, Benares, Bindraban, and Delhi—nine tenths of the words are of Sanskrit origin; whereas in the Ūrdu or Hindústání, although based upon one of the Hindí dialects (perhaps the *Brája Bháká*) and the Prakrit, at least one third of the words are derived from Arabic and Persian; and the remainder from Guzaráthí, Karnáta, Tamil, Telugu, Malayálam, Turkish, Hebrew, Portuguese, Greek, Latin, and even English. After giving a list of the gypsy words, in all 123, which he considers traceable to Hindí or Hindústání, Mr. Crawford says:

"Neither the number nor nature of the Indian words, be they Sanskrit or Hindi,—and I am not aware that there are any other than these found in the gypsy language, can warrant us in concluding that it is an Indian tongue. They are, in fact, not greater in number or in character—not more essential, than are the Malayan words in the languages of the people of the South Sea Islands, or in the language of Madagascar; tongues fundamentally different from the Malay, as well as from each other, and spoken by men different in race. I may, indeed, further add that the Indian words which exist in the language of the gypsies are by no means so numerous as the Latin ones which are found in the Welsh and Armorican, or in the Irish or Gaelic. The most copious vocabularies of the gypsy speech hitherto made do not amount to a complete language at all, nor indeed to the fourth part of any tongue, however meagre and rude. Dictionaries have been already framed of the language of the cannibals of New Zealand, which contain three times as many words as the vocabulary of Mr. Borrow, the fullest that has come under my notice."

The words referred to by Mr. Crawford as of Hindu origin, have been derived, as he says, from the vocabulary of Borrow,* which, at a rough guess hardly contains more than 2,260 words; whereas, had the author of the paper consulted Bischoff's *Deutsch Zigeunerisches Wörterbuch*,† he would have found that the gypsy language contains at least 4,500 words, which is not only a fourth as many words as some languages, but considerably more words than some languages.‡ Of these 4,500 words, at least one fourth may be traced to the Hindústání, Bengálí, Sanscrit, Malabar, Malay, etc.; the remainder being derived principally from the Turkish, Greek, Latin, Coptic, Slavonic, Wallachian, German, etc., etc. Now, when it is taken into account that the gypsies have been wandering among peoples speaking different languages for upwards of four centuries, it is really surprising that they should have preserved so much of their native tongue. Grellman, referring to a vocabulary contained in his work, says:—

"The words only have been learnt from the gypsies within these very few years; consequently at a season when they have been near four centuries away from Hindustan among people who talked languages totally different, and in which the gypsies themselves conversed. Under the constant and so long continued influx of these languages their own must necessarily have suffered great alteration, more especially as they are a people entirely raw, without either writing or literature. One word after another must have crept, from the others, into their language; consequently, by the frequent use of foreign words the gypsy word of the same sign was more rarely used, and by degrees entirely lost from their recollection, by which circumstance the original composition of their language became entirely deranged; which is the reason why, as anybody may convince themselves by inspection, all kinds of languages and idioms, Turkish, Grecian, Latin, Wallachian, Hungarian, Slavonic, German, and others make part of the above vocabulary," etc., etc.§

When I assert that at least one fourth part of the gypsy language may be traced to the Indian languages, I am, perhaps, rather under the mark. In the Mithridates of Adelung|| are given three forms of the Lord's prayer in gypsy, one of which is taken from a MS. in the University of Göttingen. The latter contains 64 words, 40 of which may be traced to the Hindústání and other languages of Hindustan. Of the remaining 24 six occur twice, so that there are only 18 words unaccounted for. If Mr. Crawford doubts this fact, I refer him to Adelung. Did the

* *Gypsies of Spain.*

† Imenau, 1827.

‡ The Manchou contains not more than 16,000 words; the Malay, 13,000; the Hebrew, 5,642; the Hindi, 6,000; and the Egyptian, 4,000.

§ *Historischer Versuchungen über die Zigeuner* (Zweite Ausg.), Götting, 1787, of which there are translations in French and English.

|| By Vater.

gypsies become acquainted with the languages of Hindustan in Europe? It would be absurd to suppose a people whose features, manners, customs, etc., bespeak their oriental origin, suddenly appearing in Europe (like the armed men who sprang from the dragon's teeth, sown by Cadmus), and speaking languages of Indian origin. Mr. Crawford tells us that the Indian words which exist in the gypsy language are by no means so numerous as the Latin ones found in the Welsh and Armorican, or in the Irish or Gaelic. The comparison is absurd when it is taken into account that the Irish contains 50,000 words, the Welsh about 40,000, the Gaelic about 23,000, while the gypsy does not exceed 4,500. But what would it prove? Say that not more than one-eighth of the gypsy language is of Indian origin, and that one half of the words found in the Celtic languages may be traced to the Latin (or rather Greek and Latin), still they are languages. Indeed, considering the ignorance displayed by Mr. Crawford in his paper on the Celtic languages, read a short time since before the British Association, perhaps the less Mr. Crawford says on those languages the better. The author of the paper further says:—

“There are absent from it (the gypsy language) also terms which ought to be Indian, if the gypsy language were of Indian origin. Thus the name for rice and cotton, the peculiar products of India, are represented, not by Hindu words, but by terms of untraceable origin.* It is the same with the names for wheat, iron, copper, brass, tin; objects familiar to the Hindus in any age that we may fancy the gypsies to have emigrated from India. In the same manner the days of the week are not Hindu, but either fabricated or drawn from some unknown tongue. We miss altogether the names of the ‘heaven’ and the ‘hell’ of Hindu mythology, although they are found in the languages of the remote islands of the Indian Ocean.”

As I have before said, when we take into account the length of time that the gypsies have sojourned in Europe, and the numerous languages and dialects in which they have been compelled to converse, it does not seem at all unreasonable that they should have ceased to use many of their native words, and that they should have borrowed others from the nations among which they have dwelt. Although the gypsies have no native name for the metals enumerated, nor for wheat, rice, or cotton; they have words for gold, silver, barley, sugar, salt, milk, water, and fish, all derived from the Hindústání. I do not know whether the gypsies wear shirts, and I cannot, therefore, say if they have any use for the word cotton; and they doubtless prefer a nice young pullet from the farm-yard to either rice or oatmeal.

* Why untraceable? The Gypsy word for “rice” is *reiso*, which in Ger. is *reiz*, Lat. *oryza*, Gr. *opυζα*, Eth. *rez*, Arab *aroz*.

"The names which the gypsies have assumed themselves, or which have been given to them by strangers (says Mr. Crawford) will not much help us in tracing their origin. Not one of them can be traced to any Hindu language." . . . "The farthest country east to which we can trace a specific name for the gypsies, is Persia, through which they must have passed in their transit, and in which it is known that they sojourned. Their name in Persia is Zengari and Zingarie; this, through the Turkish which has adopted it, is the source of most of the names by which they are called in the languages of Europe, however much these may be corrupted. Thus in Moldavia we have them as Tzigani, in Hungarian as Chingari, in Germany as Zingener (Zigeuner?), in Italian under the different form of Zingari, Zingani, Cingari, and Cingani; and in Portuguese Cigari. I think it even highly probable that the most frequent name which the gypsies give to themselves, Sicalo or Sicaloro, is no other than a gross corruption of the Persian word." . . . "In Turkey they take the name of Rum, which is but the Persian corruption of the Latin Roma, applied by oriental nations to the Turkish empire."

The appellation *Roma*, however, rather signifies "men", and is most probably derived from the Coptic. The gypsies likewise call themselves Sinte, perhaps as coming from the banks of the Sind'h, i.e., the Indus;* and Kola, according to some, from the Hindî *kālî*, black; but this latter name may be the same with Koli, Koolî, Kûlî, erroneously Kollee, the appellation of a wild and predatory tribe in the forests and wilds of Guzerat; or, perhaps, even from the Sanscrit *kula*, a family, race, tribe. In the eastern provinces of Khorassan the gypsies bear the name of Karashmâr, and in some parts of India Luli or Luri; also Kauli (a supposed corruption of Kabuli, i.e., one from Cabul); and Karâchi. The gypsies of Europe correspond in their habits with the curious tribes called Nuts or Nats, who live by feats of dexterity, sleight of hand, fortune-telling, and the like; and are numerous in Bengal, Behar, Bundelkund, Malwah, and Guzerat. They are commonly known (says a late writer) by three names—1, Nat,† a rogue, one who leads a wandering life; 2, Berîā, a dancer or tumbler, Berin, a female dancer or songstress; 3, Bâzigar, a player or juggler. The two first are Hindî names expressive of their characters; the third is a Mohammedan or Urdû appellation, of the same tribe, from the Persian *bâzi*, play, *gar*, an affix of agency. The Nuts have two languages; one for the use of the craftsmen of the sect; the other, general among men, women, and children; both are based upon the Hindústânî. The first in general is a mere transposi-

* The Gypsies, in their language, call themselves Sind; and their language has been found to resemble some of the dialects of India.—*Bombay Transactions*, 1820.

† Sanskrit *nata*, a dancer, actor, tumbler, a public performer.

tion or change of syllables ; the second is a systematic conversion of a few letters. The following is a specimen of both :—

<i>Hindustani.</i>	<i>Form 1.</i>	<i>Form 2.</i>	<i>English.</i>
Ag	Ga	Kag	Fire
G'hur	Rug,hu	R,hur	House
Sona	Na-so	Nona	Gold
Mas	Sama	Nas	Mouth
Omr	Muroo	Komr	Age

According to Richardson, the Panchpeeree or Budeea are considered as appertaining to the same class as the Bazeegurs, and are also termed *Nuts*. They differ from the Bazeegurs in many points; though probably in their manners there will be found a stronger similitude to the gypsies of Europe, than in those of any other tribe.

The gypsies also resemble some of the tribes of Hindustan in their fondness for carrion.

A writer in *As. Res.*, vol. vii, 179, says: "Both the gypsies and the Nuts are generally a wandering race of beings, seldom having a fixed habitation. They have each a language peculiar to themselves. That of the gypsies is undoubtedly a species of *Hindoostanee*, and so is that of the Nuts. In Europe it answers all the purpose of concealment. Here a conversion of its syllables becomes necessary. The gypsies have their king; the Nuts their *Nardar Boulah*; they are equally formed into companies, and their peculiar employments are exactly similar; viz., dancing, singing, music, palmistry, quackery, dancers of monkeys, bears and snakes. The two latter professions, from local causes, are peculiar to the Nuts. They are both considered as thieves, at least that division of the Nuts whose manners come nearest the gypsies. In matters of religion they appear equally indifferent, and as for food, we have seen that neither the gypsies nor the Budeea Nuts are very choice in that particular, and though I have not obtained any satisfactory proof of their eating human flesh, I do not find it easy to divest my mind of its suspicion on this head. Indeed one would think the stomach that could receive without nausea a piece of putrid jackal could not well retain any qualms in the selection of animal food. Though in the *Encyclopædia Britannica*, Grellmann's theory is thought slightly of, the similarity of language being deemed but inconclusive evidence, yet in this instance, even in opposition to such authority, I will venture to consider it as forming a basis of the most substantial kind. It is not the accidental coincidence of a few words, but the whole vocabulary he produces, differs not so much from the common *Hindoostanee*, as provincial dialects of the same country usually do from each other. Grellmann, from a want of knowledge in the *Hindoostanee*, lost many opportunities of producing the proper word in comparison with the gypsy one."

Another writer says: "In Turkey and the Levant the gypsies are called *Tchingenes*. It is now generally believed that the gypsies migrated from India at the time of Timur Beg; that in their own country they belonged to one of the lowest castes, which resemble them in their appearance, habits, and especially in their fondness for carrion and other unclean food. Pottinger, in his travels, saw some tribes resembling them in Beloochistan. There is a tribe near the mouths of the Indus called *Tchinganes*." Mr. Crawford tells us that "the language of the gypsies contains a very few words which are Hindi or Hindustani, without being at the same time Sanskrit; while the majority of the Indian words are both Sanskrit and Hindi, but in the mutilated form of the latter." Does the reader comprehend this? I do not. One of the points which Mr. Crawford says is put forward as a reason of the supposed Indian origin of the gypsies, is the history of their migrations, but this is assuming the whole question. Mr. Crawford commences with statements of others with which he seems partially to agree, but which he afterwards endeavours to refute, and concludes his paper without arriving at any conclusion as to the origin of the gypsies.

PROCEEDINGS OF THE PARIS ANTHROPOLOGICAL SOCIETY.*

At the meeting of May 5, 1864, M. Broca gave a description of the deformed cranium found at Voiteur, which he observed reminds us of the most extravagant deformations seen in the crania of the ancient inhabitants of America. M. Bonté presented to the Society a treatise by M. Joulin *On the Pelvis of Mammals*. He said that three cardinal facts were the results arrived at by M. Joulin as regarded anthropology. First, That the human pelvis, even in the most degraded races, differed completely from that of the Simian tribes, including the anthropomorphous group; secondly, That the pelvis of the negroes had noways that animal form ascribed to it by Vrolik and his followers; and thirdly, which is more important, That it is absolutely incorrect, that in the negro race the antero-posterior diameter of the superior inlet, is more developed than the transverse diameter (contrary to what is observed in the white race); that the *predominance is transverse in all human races*, and that the varieties of the shape of the pelvis in animals do not admit of making this anatomical character the base of any classification.

* Continued from vol. iii, p. 325.

Vrolik and Weber have asserted the contrary, but M. Joulin says, that they are in contradiction with the elements they have themselves furnished.

M. Pruner-Bey, in his recent work on the negro, agrees with Vrolik, Weber and Prichard, though he expresses his opinions in different terms. In his *Mémoire* (p. 298) he observes, "The cranium, imperfectly balanced, is elongated from in front backwards and laterally compressed, as is the thorax and the pelvis." He adds (p. 304), "The pelvis is remarkable for its lateral compression; the bones are very massive, the cavity is cuneiform, and inclined from the front backwards." Finally (p. 336) he says, "The lateral compression of the thorax and the pelvis, etc., are characteristic features of the Nigritian race." Now it is evident that there can be no lateral compression without the predominance of the antero-posterior diameter.

M. Joulin hoped that the Society might afford him an early opportunity of proving his assertions, not from books but from nature itself.

The Secretary then gave an analysis of Dr. Thurnam's important treatise "On the two chief forms of Ancient British and Gaulish Crania," which gave rise to the following interesting discussion.

M. Lagneau wished to know whether Dr. Thurnam in his *Mémoires* made mention of the local distribution of the two kinds of monuments in the British islands; for the presence of round barrows or tumuli in the south-eastern region of England and the south of Ireland, would give support to Dr. Thurnam's opinion that the latter were the work of a people come from Belgium. It is known that tribes who settled in the south-east of England had Belgian names. One of these peoples called themselves Belgians; another bore the name Atrebates, a tribe of which latter inhabited Belgian Gaul (Artois). In Ireland, also, the Firbolg occupied the south of that island.

M. Broca regretted, that owing to the absence of a map he was unable to follow the geographical indications of Dr. Thurnam, and to give a satisfactory reply to M. Lagneau's question.

M. Pruner-Bey said that Dr. Thurnam's treatise had raised doubts about the solution of certain questions which we had reason to believe had long been solved; that he had long been acquainted with the ideas of this his eminent colleague, and that he found it the more necessary to refute them since they had found an advocate in the person of their respected general secretary. M. Pruner-Bey then read the following paper.

Touching the question of the pre-existence in Europe of brachycephali, there is, as in all questions relating to the races of mankind, much that is certain, much that is probable, and much that is uncertain.

tain. What is certain has been clearly established in Scandinavia. There the brachycephali have preceded the dolichocephalic peoples. There the former are characteristic of the stone period, which is separated from the other periods by the absence of domestic animals, excepting the dog. Consequently the brachycephalic skulls, the absence of metals and domestic animals, correspond with the features of the stone period in the North.

There are in Southern Europe positive traces of an identically similar stone period. Implements made exclusively of stone or bone, no traces of domestic animals, fragments of human bones, belonging chiefly to a brachycephalic race, are found in France, Belgium, etc. But, as regards the succession of ages in Western Europe, science does not possess facts so positive as those relating to the North. I mean that, on leaving the field of palæontology, the separation of ages cannot be so clearly demonstrated. On the contrary, we find here the marks of a transition; and here it is that the confusion concerning the succession of human types commences. In point of fact, no sooner do objects of metal appear, than they are found either intermixed with stone implements, or, where they are isolated, they are also found associated with types of crania resulting from intermixture of the two races.

Accident may give rise to error. Supposing, for instance, that in England or elsewhere there are found in graves a certain number of elongated skulls exclusively associated with stone and bone implements, and, inversely, brachycephalic crania accompanied by metal objects, we might then feel authorised to assert that the dolichocephali had preceded the others. Has this really happened? Nearly all English anthropologists support this theory; they believe that the order of succession is in their country *inversely* that of Denmark. But this theory is open to objection.

1. The Celts of the British Islands have used stone weapons down to an epoch very nearly approaching our own. In Irish legends the "leah-míleadh" (sling-stone carried in the girdle) plays an important part in the poetry of the bards. The various terms for spear are also reducible to the root signifying stone. Consequently the association of stone implements with the elongated crania of the British Islands, only proves to me the Celtic origin of these crania.

2. As regards the pre-existence of the brachycephalic type in these islands, the facts relating to this question are, to the best of my knowledge, not numerous, and are often advanced by authors under the influence of preconceived opinions. Thus Mr. Wilde, the founder of anthropology in Ireland, an eminent *savant*, hesitates to accord to the brachycephali pre-existence in Ireland, chiefly on account of the development of the forehead being greater in the brachycephali than in

the dolichocephali. Similar views have guided Eschricht in characterising the Danish brachycephalic type; he considered it as of Caucasian origin. It is here noteworthy, that it is precisely in those Irish graves which most resemble the Scandinavian graves of the stone period that, so far as I know, no human bones were found; thus the question, as regards Ireland, is still an open one. Prehistoric Scotland has been revealed to us by the remarkable work of Dr. Wilson. This author acknowledges the presence of two cranial types in his country in prehistoric times. He has given a good table, in which he classifies the crania which appear to him typical of the extremes. But, whilst he admits the prehistoric existence of these two types, he cannot get rid of the historical race of the Celts; and he consequently places his Celtic type between the two extremes, and associates with them very dolichocephalic crania. This procedure is very significant. It shows, on the one hand, that, in consigning the true Celtic type to the prehistoric races, we must make use of the intermixture between the Celts and brachycephali. Mr. Wilson, nevertheless, speaks with the reserve of a *savant* on the question of the pre-existence of either type, keeping the question open until we are in possession of a greater number of facts; and he is quite right.

3. Very recently the London Anthropological Society has published in its *Review* (February), a fact which alone clearly proves the existence of a brachycephalic race in Scotland during the stone period. The skeleton found at Bennet Hill, the cranium of which was carefully compared with Danish crania by our eminent colleague, Mr. Busk, furnishes another proof of the great caution needed in the treatment of the present question. We have here a brachycephalic cranium approaching very nearly the Danish type, also rude flint implements, *kjökken-möddings*, as in Denmark; in short, all the characters which tend to establish the high antiquity of the brachycephalic race in Scotland.

4. As regards England, I cannot take upon myself to reply to so conscientious an observer as Dr. Thurnam, and one who deserves so well of our science. Nevertheless, the proofs hitherto furnished as regards the inverse order in which England is said to have been peopled, compared with Denmark, appear to me insufficient. So long as the successive ages in that island are indicated solely by implements, I must, for reasons already given, reserve my opinion. Supposing, even, that after the arrival of the Celts in England, some brachycephalic colonists, acquainted with the use of metals, had then arrived in England, say from France or Spain; such exceptional cases would by no means tell against the general and well established order in which Western Europe had been peopled.

It were desirable that the same importance should be attached to

palæontological facts in England, as is now done in France; the question might then receive a solution, tardy, perhaps, but positive. We may rest assured that such will be the case, for our sister society of London contains all the elements requisite for the definitive solution of the problem under consideration.

M. Broca said that it was not without a certain astonishment that he saw M. Pruner-Bey approach the tribune, with a written paper in reply to his analysis of Dr. Thurnam's memoir. He would, in the first place, tell M. Pruner-Bey that, in his quality of secretary-general, it was his duty to give a faithful account of Dr. Thurnam's opinions, without, however, constituting himself the advocate of the views of the honourable English anthropologist. He fully concurred in some of the opinions enunciated, but entirely dissented from others. Resuming now his character as a member of the society, he would enter into the discussion on his own account.

I cannot accept, continued M. Broca, the explanations of M. Pruner-Bey. The stone age is not a period of which the beginning entirely resembles the termination. It had its distinct phases. At first, rudely worked stones occur, without any vestiges of domestic animals; then are found better polished stones, together with the bones of animals now no longer existing in our climate (the reindeer); and finally stone implements of finer workmanship, no longer associated with the bones of the reindeer, but with those of domestic animals.

Whenever a grave contains human remains in either of the above conditions, without any traces of metal, this appears to me incontestable proof that it belongs to the stone period. If this applied only to a single grave or a small number of graves, I could understand the doubts; but such is not the case. In the north as well as in the south, in Central as well as Western Europe, a large number of such graves are found, all resembling each other, all containing the same stone implements, worked in the same fashion, with or without the traces of animals, domesticated or otherwise. The absence of metals cannot, therefore, be ascribed to accident; and it appears to be demonstrated, that these various graves are indicative of the progressive civilisation of peoples acquainted with the use of stone only. So far from denying, I am rather disposed to believe, that the stone period is connected with the bronze period by a transitional epoch, which enables us to find domestic animals and stone implements associated with metals; for which reason I have put the question to our archaeological members, whether their researches have established as a certainty that the first Indo-European invaders knew the use of metals? Their reply was sufficiently favourable to allow of the assumption that the transition period then commenced. It seems to me, therefore,

logical to infer that, if the graves devoid of metals contain dolichocephalic types, this dolichocephaly is foreign to the so-called Celtic period, and that it is at least contemporaneous with the brachycephalic types found in Sweden and Denmark. It follows, therefore, that the dichotomy of Retzius must be accepted with great reserve—an opinion already expressed by me, on the occasion of my depositing in the museum the sixty Basque crania which M. Velasco and myself had collected. Contrary to a long prevalent idea that the Basques were brachycephalic, it has been demonstrated by actual measurement, that the dolichocephalic type greatly predominated. As these crania came from a locality in itself a sufficient guarantee of the authenticity of their origin, I still retain my opinion, despite the observations of M. Pruner-Bey, who only assimilated one purely brachycephalic cranium to the Iberian type, referring those bearing a decided dolichocephalic character to the Celtic type, probably derived from Ireland or France, and comprising under the name of Celto-Iberians all cases where dolichocephalic shape is less distinct.

Our colleague has a very simple theory. Every pre-Celtic cranium must be brachycephalic, and every dolichocephalic cranium must be Celtic. The Neanderthal man is a Celt, because he is dolichocephalic; the woman of the dolmen of Meudon is of the Celtic race, for the same reason; whilst the brachycephalic man in her company is of the pre-Celtic race. The dolichocephalic cranium of Chamant is also Celtic. Thus the Celts have with us preceded the bronze age. M. Pruner-Bey should tell us clearly what he thinks of this. The Basques ought to be brachycephalic, since they speak a pre-Celtic language. According to his theory, the Basques of Z——, who speak Basque but are dolichocephalic, immediately become a colony of Celts; the dolichocephali of Britain become Celts, simply because they are dolichocephalic; the long barrows of the stone period, in which only dolichocephalic crania are found, immediately become Celtic monuments. The convictions of our colleague are so decided, that he found himself in a condition to refute the memoir of Dr. Thurnam when it was still unpublished. And upon what are his convictions based? Upon a theory which itself is questionable.

M. Pruner-Bey: I shall examine the arguments of M. Broca successively, but in an inverse order. As regards bronze, and, I may add, copper, as a characteristic of the Celtic period, I entirely agree with the archaeologists, as stated in the note which provoked the reply of our honourable colleague. I am still of opinion that human crania, when they present in the cerebral skull as well as in the face a type so definite as that of the Celts, are at least as indicative, and even
* still more so, than the objects found along with them; and, from my

former writings, it will soon appear that I do not consider a cranium Celtic simply because it is dolichocephalic. As regards the stone period, and the inference to be drawn from the fact that stone weapons are in certain graves found with dolichocephalic skeletons, I must enter into some details to explain my doubts on this subject. The circumstance of our finding in certain ancient graves stone implements associated with bronze instruments, proves that the two periods were not abruptly separated; in other words, we must admit a transition period. This is sufficiently proved by the researches of Mr. Wilde in Ireland. He has, in fact, not only demonstrated the existence of a large quantity of copper instruments, but he has established the fact that the most usual and the rudest among them are imitations of analogous stone implements. From these two series of facts, we may infer as follows: Although the Celts were acquainted with the application of the above metals, it does not follow that in our latitude they made exclusive use of them; and consequently, if skeletons, in my opinion Celtic, are associated with stone weapons, it does not necessarily follow that we are face to face with a stone period pure and simple—an age which is lost in the darkness of night, while its end almost approaches our period. In point of fact, the inhabitants of Great Britain made partial use of stone weapons in the conflict with William the Conqueror, and even the French had stone-axes; whilst the stone-hammer had scarcely commenced to disappear to Germany. Moreover, might not the preference have been given to stone weapons in selecting such as were to be deposited in the graves of the departed?

I must recur to the sixty Basque crania, for which the society is indebted to the generosity of our Secretary General. This collection consists of three classes of crania, the first and smaller portion is brachycephalic; the second forming the majority is dolichocephalic; whilst the third, resulting probably from a mixture of the two extreme types, is mesaticephalic. The results of this classification accord completely with what we have been told by competent observers (M. de Gobineau, M. de Montague) on the multiplicity of the Basque type. M. d'Abbadie, himself a Basque, and a scrupulous and practised observer, maintains that there exists no uniform Basque type, and that he had distinguished at least three which differ by the *ensemble* of their characters. Is this anything else than the incontestable indication of intermixture? Moreover, I have myself studied the history of that country, and have also been informed by the *savant* just cited that, however exclusive the Basques may be as a general rule, they have accorded the right of citizenship to the Irish, and in fact an Irishman once established amongst them enjoys all the rights of a native. All

this leads me to presume that the brachycephalic stock represented, both in the crania and in the living in the Basque provinces, is that of the ancient Iberians, and that the elongated crania there found in certain spots are of Celtic origin. I have thus a wider basis than had the late M. Retzius.

There is, however, a means of coming to an understanding on the question of the dolichocephali whom M. Broca and Thurnam consider as pre-Celtic. Let those who are of this opinion first clearly define the Celtic type, and then show us by one of the craniometric methods now adopted the differences which separate their pre-Celtic dolichocephali from the genuine Celts. Then only shall we be able to discuss the reality and the value of these differences, and place this interesting question on a solid basis. But as long as we employ only general terms we shall be far from attaining our object. For my part I have always abstained from complicating these questions, and until I am better informed I shall maintain, in reliance upon history, that the west of Europe was and is still preferentially occupied by Iberians and Celts differing as regards crania, stature, hair, etc. As regards the Celts, I have already had occasion to demonstrate that their crania, though dolichocephalic, on the whole, present, at least, three varieties. The ancient brachycephali, in the study of which I am now engaged so far as the materials at hand permit, and shall have the honour shortly to submit the results to the society, also present different states according to the epoch to which they belong. These variations are, as among the Celts, met with over the whole area formerly occupied by this group; we are not, however, on that account justified in giving an opinion on the unity or plurality of this stock. One word more as to the proper or improper application of the term stone-age to the relics found in graves. I admit that appearances are against me when I contest the propriety of the term, when by the side of the skeleton stone implements alone are found. Nevertheless, the archaeological and historical considerations which I have just indicated justify my doubts in lack of better information, and, on the whole, I believe that craniology is entitled to the last word on this subject.

M. Leguay: I concur in the opinions expressed by M. Broca as regards the monuments of the stone period, and I dissent completely from the views of M. Pruner-Bey. I do not agree with those who hold that there was one, and only one, stone period. As regards France, while accepting the theory that the arrival of the Celts, or rather that the period called Celtic, coincides with the arrival of domestic animals, my opinion is that the latter have preceded by many centuries the introduction or the discovery of bronze, which it is believed was introduced by the Celts or *pseudo-Celts*.

Three, I might say four, distinct stone periods have hitherto come under our observation. They may be determined by the nature and the comparison of the various objects they have produced. Two of these are palæontological.

1. The first, contemporaneous with the quaternary strata, preceded the great revolutions which have transformed the surface of that portion of the globe we inhabit; I pass over, as not sufficiently proved, the recent discoveries of M. Desnoyers in the tertiary strata.

2. The second stone period, much nearer to us, followed the above revolutions. This epoch, contemporaneous with extinct as well as some existing animals, has left numerous traces in the caverns. The presence of the rein-deer, *ursus spelæus* and large *felidæ* characterise this epoch. The horse and the deer also were not unknown.

3. The third succeeding age may be subdivided into two periods: *a.* The one prehistoric, entirely resembling the preceding age as regards the material, viz., *flints*, differs from it completely as to the form. The horse and the deer only now and then occurring in the preceding age now appear under all circumstances with the *Bos primigenius* and a large number of domestic or wild animals. The reindeer has disappeared, or rather it has not yet been met with. *b.* The second period approaching to or forming part of the so-called Celtic or bronze period shows only domestic animals. Was bronze already known at this period? I cannot tell; the graves of this period do not contain any. This last period has continued as a stone period during the bronze age, during the iron age in the time of the Romans, and even later flint was used for a variety of purposes. . . .

M. Dureau said that he shared M. Pruner-Bey's opinion that the stone age can be much better studied in the north of Europe, Denmark and Sweden. Concerning the division of the stone period into several epochs, he believes it impossible, in the present condition of archæology, clearly to establish such a division.

M. Leguay replied that the stone periods might be determined by two modes, the fauna and the flints, the monuments and the implements of each epoch. The flints always coincide with the fauna. In the first age which can be determined by the fauna, or rather by geology, the flints contemporaneous with antediluvian animals are in harmony with them. We then find the rude hatchets in the deposits of the quaternary epoch. Some knives and other flints are found with them, but in a rudimentary state, and when they are compared with those of the succeeding period it is immediately seen that they cannot have been produced by the same individuals,—this is the age so well studied by M. Boucher de Perthes.

The second age is characterised by flints of far superior workmanship.

It might, perhaps, be called the knife age, for knives are found in such numbers that the other implements form, as it were, the exceptions. What mainly characterises this epoch is the presence of carved bones of the reindeer and stag antlers. An attentive study of these objects shows that there existed an artistic sense sufficiently developed to denote a relatively advanced civilisation which is not shewn in the succeeding age. The fauna of this period distinguishes it from that which succeeded it quite as clearly as the flint implements. Pottery is absent. It ought to exist, and its disappearance is a fact which still requires explanation. The numerous discoveries of this epoch have been made by Messrs. Lartet, Christy, de Vibraye, Garrigou, Brouillet, Millet, etc.

The third age comprises two divisions, which differ little as regards the flint implements and the pottery. The flints of the first portion resemble those of the second age, but they are associated with coarse pottery mixed with pebbles, cinders, and even bones, whilst the second portion of this period is distinguished by well-finished objects, and those polished hatchets so much sought after. . . . In the first division of this age occur the dolmens and other monuments of the so-called Celtic period. . . .

From these facts the different stone periods may in a general way be determined.

M. Gustave Lagneau then read a paper on the deformed cranium found at Voiteur.

At a meeting of the society, May 19th, M. Lucien Biart, correspondent at Orizaba, sent from Mexico a chest containing fossils and two crania obtained from the grotto d'Escamela at Orizaba.

M. Perier then read the following note "On the Annamites of Lower Cochin China," written by a physician :—

Lower Cochin China is, in consequence of several revolutions, inhabited by a mixed population. There are met with in all parts of the Annam Empire Chinese and natives, Kambodjiens, Fankins, etc. The primitive population still exists ; it possesses a peculiar physiognomy, apart from the characters common to all the Indo-Chinese races. The general form of the head is cylindrical, the top is flattened ; the antero-posterior diameter is smaller than is the case with Europeans, and an examination of the cranium shews that the occipital foramen is behind the median line.

The face is flat and broad, owing to the development of the cheek-bones, which are prominent and rounded ; forehead broad and arched, eyes small, nose flattened at the root, mouth large, lips thick, inferior jaw strong, specially below the zygomatic arches. Beard weak, and appears very late ; hair jet black.

The trunk is uniformly square, so to speak, from head to foot. The

Annamites have, as it were, no figure. The pelvis is very wide, which imparts to their walk a somewhat theatrical swagger. The women, as is natural, have this part of the body more developed than the males, and this conformation is frequently met with on so exaggerated a scale that the axes of rotation of the thighs are so wide apart that each step is accompanied with a double movement of rotation in a semicircle right and left.

The limbs are not deficient in development, specially the thighs, which, in some cases, seem as thick as those of Europeans. But the muscles, though voluminous, are flabby and far from being an indication of strength. A peculiar structure of the big toe on each foot is often met with; these diverge from the others to such an extent, that when the feet are close to each other, the two big toes overlap. So placed, the toes seem susceptible of a certain education, and certain Annamites frequently use the foot as a prehensile organ. The colour of the skin is yellowish, and the stature low, which, combined with the absence of the beard, give them a juvenile appearance. It is said that they live to an advanced age, and according to the natives centenarians are by no means rare. They have less tendency to grow fat than the rest of Indo-Chinese. Obesity is, however, still considered a beauty amongst them as among all their race.

The Annamite has a gay and noisy disposition, he is intelligent and adroit, but lazy and a liar. Under the influence of fear he becomes humble, cringing and passively obedient to an incredible degree. With them the noble organ is not the heart, but the liver; of a brave man they say: he has got a liver. (Zinguetti, *Méd. maj. Une année en Cochinchine, dans le Recueil de Mém. de Méd. de Chirurg. et de Pharm. Milit.*, Fevr. 1864, t. xi, p. 98-100.)

Recruits for the Army.—Dr. Guibert, of Saint Brieuc, transmitted to the society some remarks relative to the discussion on the examination of conscripts, which had taken place at the meeting of February 4. M. Broca, M. Boudin, and others, who have written on exemptions from military service by reason of not coming up to standard, have based their calculations on the total number of the conscripts examined which has been compared with that of the number rejected for being below the fixed height. Dr. Guibert is of opinion that only the latter number should be compared with the number of conscripts declared fit for service, inasmuch as the persons exempt from service on account of diseases and infirmities are not measured at all.

M. Boudin and M. Broca both concurred in the opinion expressed by Dr. Guibert.

Plaster Casts.—M. Broca, in presenting to the society six plaster casts of crania, which he had ordered for the purpose of facilitating

exchanges with other societies, called attention to errors which might arise as regards measurement. That plaster expanded was well-known, but he was not aware that it took place to the extent which he found to be the case. In comparing the six casts with the six original crania he found the former considerably larger than the latter. All the diameters had increased, the antero-posterior had, for instance, become longer by from two to three millimeters. And what is worse, the increase of volume is not proportionate to the volume of the crania; he suggested, therefore, that when casts were sent they should be accompanied by a table showing the principal dimensions of the original crania; this he had just done in the case of some casts sent to the London Anthropological Society.

M. Gratiolet said that the expansion varied according to the degree of purity and hardness of the plaster, he would, therefore, ask whether the result indicated by M. Broca may not fairly be attributed to the inexperience of the moulder.

M. Broca replied that the casts had been made by M. Talrich, the modeller to the faculty of medicine; the casts were otherwise excellent; he thinks, therefore, that the dilatation had taken place after the casts had been taken from the moulds. At all events, whether the differences subsisting between the models and the casts depend on the skill of the moulder or not, the casts should always be accompanied with a table of the measurements of the original crania.

M. de Quatrefages then read a paper "*On the tradition of the Tiguex concerning the sacred tree of the Mexicans.*"

The transversalis pedis in the foot of the Gorilla.—Report by M. Alix on a treatise sent by Mr. Thomson, which had previously been submitted to the Medical Society of Victoria (Australia).

Riolan gave the name of *transversus pedis*, *transversalis pedis* to that muscle in the foot of man described by Cruveilhier as the transverse abductor of the big toe, and which Chaussier called the transversal metatarso-subphalangean of the great toe. Tyson said that this muscle did not exist in the chimpanzee, an error which seems inexplicable, as no minute examination is requisite to find it. Duvernoy (Arch. du Museum), whose treatise Mr. Thomson inadvertently ascribes to Is. Geoffroy Saint Hilaire, mentions its presence in the gorilla genus; and Mr. Thomson, who does not appear himself to have dissected a gorilla, quotes this authority in support of his proposition. This fact being established, he draws two inferences. First, that Tyson in his enumeration of the differences between man and monkey has given one point of difference too much, in which we agree with him. The second inference which Mr. Thomson draws from the existence of this muscle, is that it becomes an argument against those who maintain that man

cannot possibly be the descendant of the gorilla. His own words are "I may, nevertheless, take the opportunity of observing that the theory which would deny the possibility of a derivative origin of a higher order of beings from the gorilla must be erroneous in as far as it is deduced from the alleged absence of the transversus pedis muscle."

We cannot in this respect agree with Mr. Thomson. One of the great principles of zoological classification, is the subordination of characters. Now the absence of transversus pedis would in our view be but an insignificant point in presence of other differences of another character which distinguish the foot of man from that of the ape. But this muscle exists in both in order to show at once the unity of plan which unites them and the variations which separate them.

It might be easy to conceive the foot of man deprived of the transverse abductor, this little muscle, as Cruveilhier calls it; an anatomist might even consider it an accessory muscle.

Such is not the case with apes, whose big toes are greatly divergent, so that the foot becomes a prehensile organ. The transverse abductor in them is wider, whilst when relaxed it presents greater length at the level of the first inter-metatarsian space, when it assumes the aspect of the abductor pollicis of the hand. In monkeys it really becomes a muscle of the big toe, and its absence would in them be less conceivable than in man.

In man there exists another abductor of the big toe—this is the oblique abductor of Cruveilhier. This starts from the tarsus and the posterior portion of the metatarsus, and takes an oblique inward direction towards the great toe; it is manifestly separated from the transverse abductor, a triangular space being left between these two muscles. In apes this space is filled up, the muscular fibres are continuous, and at first sight they might be looked upon as forming a single muscle; but in dissection it is seen that the oblique abductor reaches and covers the inferior portion of the transversus. It is probable that Tyson has included the whole mass in the oblique abductor. . . . In these muscular dispositions it is impossible not to recognise organs, constructed, it is true, of the same materials, but adapted to different ends, adaptations which cannot be the results of successive metamorphoses, not acquired but pre-ordained, and that between the disposition which characterises man and that which characterises the ape there obtains an impassable gulf.

M. Perier read a memoir "on Ethnic Intermixture."

The meeting then adjourned.

(To be continued.)

Miscellanea Anthropologica.

The Memoirs of the Anthropological Society.—An article appeared in the December number of our contemporary the *Ethnological Journal*, purporting to give a review of the Memoirs of the Anthropological Society of London. We desire to refrain from expressing any opinions on such a performance. Mr. E. Sellon, the author of one of the papers published in this volume of *Memoirs*, writes to us thus:—"The attack is so much more in the spirit of a Calvinistic preacher and Puritan, than either a scientific man or a polite scholar, and betrays such a profound ignorance of the subject under review, that it would be lost labour for me to endeavour to dispel the mephitic vapours of intolerant cant, prejudice, and conventionalism displayed in that article."

Mr. W. T. Pritchard also writes:—

"Referring especially to the comments upon my own papers, let me point out certain misrepresentations the reviewer has made, and certain 'delusions' he has advanced.

"He remarks, respecting my first paper, that 'it is the result of fifteen years residence in what is popularly called the *Fiji group* of the South Seas; but it gives also an account of the two nearest groups to them—the Tongan Islands, and the Samoan Islands.' Now, if the reviewer had read carefully, he would have seen it clearly stated that I simply collate the results of my personal observations while *residing amongst the islanders of the Pacific*, not in the Fiji group only, during a period of fifteen years. I wrote of groups where I have personally resided, whose people, languages, manners, and customs, I know intimately; and I refrained from offering a mere compilation from the observations of others, or giving stories collected during only a passing visit at other groups.

"The reviewer observes that, 'so long as I confine myself to what I have seen with my own eyes, I am both graphic and accurate.' I thank him for his testimony; but, to know whether it is worth anything, I would ask, has he himself visited the islands? If not, how comes he to *know* the description is 'accurate', and to be able to give so decided a testimony on the subject? That it is 'accurate' I know, and those know who *have visited* the islands. But, judging from the reviewer's subsequent intimation, that only a 'few words' of the Malayan have 'been detected in their languages', I am led to suspect he writes on the subject without any competent knowledge of the South Sea Islanders.

"On the subject of the *origin* of the islanders in question, the reviewer seems, indeed, wholly at sea. I beg him to read my paper again more carefully, and to note that I merely *state* my opinion of their origin, and then relate certain traditions and facts. But whether or not it be a 'delusion to trace the fairer races of the Polynesian Islands to the Malays, on the slender evidence of a few words having been detected in their languages', as the reviewer voluntarily alleges,

let me call in the authority of one whose opinion will certainly carry as much weight as that of the reviewer. Mr. Crawford, in his *Indian Archipelago*, says, 'Interesting hints are supplied to us from the collation of language.' In vol. ii, page 78, speaking of the 'great Polynesian language,' he distinctly says it is a 'language which extends its influence from Madagascar to New Guinea and the *South Sea Islands*,' quoting at page 90 from the *Tongan dialect* (amongst others), to prove his position. And then at page 93, he adds, 'The Polynesian language can be traced only as it is scattered over a thousand living dialects.'

"It happens, however, that the example instanced by Mr. Crawford is mis-spelt by him, and does not mean in the Tongan dialect what he states it does. He gives the words *wulu* or *bulu* as the Tongan for *hair*. The letter *w* does not even exist in Tongan; and *bulu* is a *gum* used for caulking canoes; it is also the *husk* of the *cocoa-nut*. In Tonga, *ulu* is the *head*, as totally distinct from the *hair*. And in this sense, *ulu* becomes the root of many composite words, e. g., *ulu-ua*, *uluhina*, *uluŋ*, &c., &c. In all these instances the idea is of the *head altogether*, as distinct from the *hair alone*. The word for *hair* is *lou-ulu*, and conveys the idea of the *hair of the head only*, as quite distinct from the head (*ulu*). For hair on any other part of the body, the word is *fulufulu*; by adding *buaka*, or *moa*, &c., it comes to mean the *hairs of a pig*, or the *feathers of a fowl*, &c. In Samoan, the head is *ulu*; hair of the head, *lau-ulu*; hair on any other part of the body, *fulu* or *fulufulu*; on one particular part, *fugu* (=fungu).

"In Tahitian, *uru* is limited to the *skull only* (as also *apuroro*); *upoo*, the head (as *ulu* in Tongan and Samoan); *rouru*, the hair of the head; *huruhuru*, the hair of any other part of the body (also *hete-hete*). In each dialect the word for hair of the body, as distinct from the hair of the head, comes to mean the hair of any other animal, or the feathers of fowls, by the addition of the name of the animal or fowl. In Fijian, the head is *ulu*, or *uluna*; the hair of the head, *drau-ni-uluna* (literally *leaves* of the head); the hair on any other part of the body, *celua* (=thelua); hair on one particular part, *vulua*; the hair of any animal other than man, *vitika*, or *vitika-ni-manumanu*; and when applied to birds, this also means feathers.

"Mr. Crawford gives *bulu* as the Malayan for *hair*. I should like to compare notes with him on this word, as well as on others which may occur in the East and in the Pacific, and trace them out together. Why the origin of the 'fairer races of Polynesia' is still so obscure, is simply because men (like our reviewer) who know nothing of the subject, write nonsense, while those whose knowledge, if brought together, would elucidate the question, keep their knowledge for the most part to themselves. This is to be regretted.

"I must, therefore, take exception to the reviewer's 'dogmatism,' as well as to his delusion, to say nothing of his grammar. And, supported by the great authority quoted above, not to name Pickering and others, I think I may safely apply his own words to himself, and tell him that 'he blunders like a mere innocent' when he says 'The truth is, there is no more ground for ascribing a foreign origin to the inhabitants of the isles of the Pacific than to the black swans of Australia.' I am

almost inclined to think, since the 'delusion' is so 'dogmatically' thrust into his comments, that 'the truth is, the reviewer took occasion of my paper to make a hit at Mr. Crawford's opinions rather than at mine,' as it is Mr. Crawford who uses the 'slender evidence,' impugned.

Professor Phillips and the British Association.—We have received a communication from Professor Phillips requesting us to insert the word "council" for the word "officer" in the report of his speech at the general committee of the British Association (see vol. iii, p. 361, line 24th from top.)

We have much pleasure in calling attention to this wish of Professor Phillips, as it removes the inconsistency of which we complained and to which we called attention: that gentleman not being at the time an "officer" of the Association. The paragraph will now read that the privilege of introducing a motion affecting all future legislation without giving the least notice of such intention, "had never yet been denied to the council of the Association." We regret to perceive that this correction does not at all lessen the inexpediency (to use no stronger expression) of such legislation. We trust that Professor Phillips will see the expediency of withdrawing the resolution so hurriedly passed last year, and allow the British Association to be governed, as heretofore, by the General Committee.

We understand that the following are the contemplated arrangements for the reading of papers before the Anthropological Society of London during the next quarter.

On January 16th, J. Meyer Harris, Esq., "On the Gallinas, a tribe of Sierra Leone," and G. W. Marshall, Esq., LL.M., "On Genealogy in its relation with Anthropology." On February 6th, H. J. C. Beavan, Esq., Hon. Sec. A.S.L., "Notes on the People inhabiting Spain;" Hyde Clarke, Esq., LL.D., "On Moravian Wallachia," and "Observations on the Materials for Anthropology at Smyrna." On February 20th, L. O. Pike, Esq., M.A., "On the Psychical Characteristics of the English People." On March 6th, W. H. Wesley, Esq., "On the Iconography of the Skull;" A. Higgins, Esq., "On the Orthographic Delineation of the Skull;" C. Carter Blake, Esq., "On a Skull from Louth," and Dr. Paul Broca, "On a New Goniometer." On March 20th, George Petrie, Esq., "On the Pre-historic Antiquities of Orkney," and Joseph Anderson, Esq., "Report on the Ancient Remains of Caithness."

The anniversary of the Anthropological Society will be held on Tuesday, January 2, at four o'clock. Afterwards, the Fellows of the Society and their friends will celebrate their third anniversary by dining together at St. James's Hall.

The Anthropological Society of Madrid held its first ordinary meeting on Sunday, the 17th of December last. The outbreak of cholera prevented their meeting before; all the schools and societies being closed by order of the Government. This Society already numbers three hundred members. In our next issue we shall give an account

of the papers read before this Society. Don Matias Serrano is the president, D. S. Castro the vice-president, and Don F. Delgado Jugo the secretary.

The Antiquity of Man and Pre-Historic Times.—We have received from Sir Charles Lyell proofs of some pages of the new edition of his "Antiquity of Man," which relate to a matter touched upon in a review of Sir John Lubbock's "Pre-historic Times," in the October number of the *Anthropological Review*, p. 388. The following remarks are made by Sir C. Lyell at the close of his preface, after mention of the authorities on whom he principally relied in describing the Danish shell-mounds:—"It was impossible for me, with the aid of such able investigators, to overlook any of the most striking discoveries and conclusions which had been made before 1860; but I gladly took advantage of the later numbers of Keller's 'Pfaflbauten,' and of Mr. Lubbock's 'Memoir on the Danish Kjökkenmöddings,' printed in the October number of the 'Natural History Review' for 1861, to improve the wording, and occasionally the subject-matter, of certain passages for which M. Morlot had already supplied the principal data. I had no space, without disturbing my type, for entering on a single new field of inquiry, or any new deductions furnished by Messrs. Keller, Lubbock, or other writers. Had I attempted to do justice to them, or to any authors of later date than the summer of 1860, I must have expanded the plan of my whole book, and seriously delayed the publication of the first edition, as well as of the subsequent issues." In a note later on, mention is also made of Sir J. Lubbock's paper in the "Natural History Review" for October 1861:—"Mr. John Lubbock published in the October number of the 'Natural History Review,' 1861, p. 489, an able paper on the Danish 'shell-mounds,' in which he has described the results of a recent visit to Denmark, made by him in company with Mr. Busk."

The facts of the case may be profitably stated to show how such misunderstandings may arise. It seems that Sir Charles Lyell drew up his account before Sir J. Lubbock's paper in the "Natural History Review" was written, and when it appeared he inserted a note to the effect that he had been unable to make use of it. In giving the finishing touches to his proofs, however, he afterwards did make use of it to some slight extent, but inadvertently left standing the note which had now become incorrect. Upon this, Sir J. Lubbock rejoined in the preface to his "Pre-historic Times," in the passage our review commented upon. But we understand that on becoming aware of the real state of the case, he had this note cancelled, so that only the first few copies of his work were issued with it.

Our review was written with no wish to take the side of either of the two eminent scientific men who had unfortunately come into collision, but spoke in the interest of the readers of both, and we are happy to find that the whole discussion arose out of a mere oversight, and has been set right in a friendly spirit.